

MDX-66XLP

SERVICE MANUAL

Ver 1.1 2002. 04

US Model
Canadian Model
AEP Model
UK Model



Model Name Using Similar Mechanism	NEW
Mini Disc Mechanism Type	MG-798LP-133
Optical Pick-up Name	KMS-241C/J1N

SPECIFICATIONS

System	Mini disc digital audio system
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit
Signal-to-noise ratio	95 dB
Outputs	Bus control output (8 PIN) Analog audio output (RCA PIN)
Current drain	300 mA (MD playback) 600 mA (during loading or ejecting a disc)
Dimensions	Approx. 176 × 83.5 × 142 mm (7 × 3 3/8 × 5 18/32 in.) (w/h/d) not incl. projecting parts and controls
Mass	Approx. 1.1 kg (2 lb. 7 oz.)
Power requirement	12 V DC car battery (negative ground)
Supplied accessories	Mounting hardware (1 set) Bus cable 5.5 m (1) RCA pin cord 5.5 m (1)

- U.S. and foreign patents licensed from Dolby Laboratories.
- Design and specifications are subject to change without notice.

FEATURES

- MDLP (MiniDisc Long Play) playback.
- Sony BUS system compatible with mobile MD changers.
- Direct-in system for inserting and removing MDs easily.
- The MD changer compartment has a built in light for easy use even in the dark.
- 1 bit Digital/Analog converter for high quality sound reproduction.

MINIDISC CHANGER

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e Vehicle Company
Published by Sony Engineering Corporation

SONY®

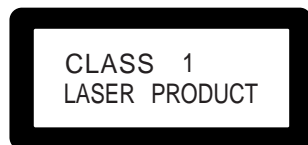
SERVICE NOTE

US, Canadian model

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

AEP, UK model



This label is located on the bottom of the chassis.

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

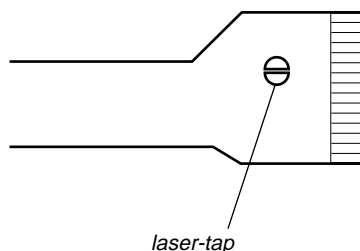
NOTES ON PICK-UP FLEXIBLE BOARD

The pick-up flexible board in this set is secured to the optical pick-up with an adhesive tape. Once the tape is removed, an adhering force becomes weak, and it cannot be reused.

Therefore, if the optical pick-up is replaced, replace also the pick-up flexible board with a new one.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK (KMS-241C/J1N)

The laser diode in the optical pick-up block may suffer electrostatic break-down easily. When handling it, perform soldering bridge to the laser-tap on the flexible board. Also perform measures against electrostatic break-down sufficiently before the operation. The flexible board is easily damaged and should be handled with care.



OPTICAL PICK-UP FLEXIBLE BOARD

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SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK \triangle OR DOTTED LINE WITH MARK \triangle ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE \triangle SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

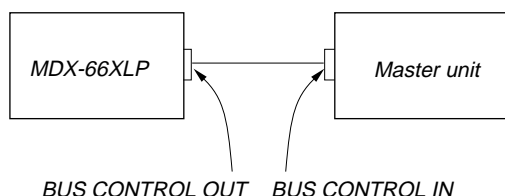
SECTION 1 SERVICE NOTE

1-1. TO PLACE THE SET INTO PLAYBACK MODE

The this set has no key control function and cannot be placed into the Playback mode alone.

For key control, the this set is controlled through serial communication with a master unit (car audio player, TV tuner or source selector compatible with the Sony BUS system.)

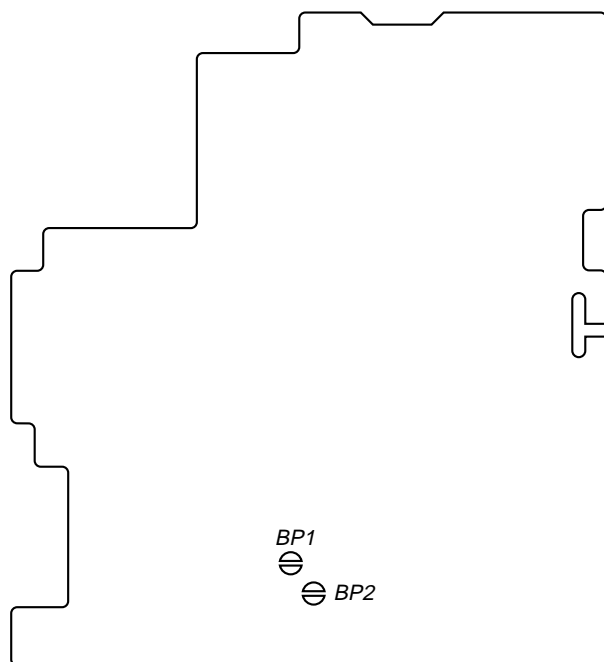
To service the this set, the set should be connected as given below:



1-2. HOW TO CHECK THE SERVO BOARD WAVEFORMS

1. Remove the panel (rear) assy, case (upper) and panel (front) assy. Then, remove the main board from the mechanism deck. (See page 8 of "SECTION 3. DISASSEMBLY".)
2. Remove the chassis (OP) block from the mechanism deck. (See page 9 of "SECTION 3. DISASSEMBLY".)
3. Short each bridge points BP1 and BP2 on the main board by solder bridge.

– main board (conductor side) –



4. Connect the power board with the main board by the main flexible board. Connect the main board with the servo board by the servo flexible board.
5. Connect to a master unit. With the master unit OFF, press the preset buttons **4** → **5** → **1** (2 seconds or more each) in this turn to enter the TEST mode.
6. Open the doors and insert a disc in the chassis (OP) assy. Use the **[SOURCE]** button on the master unit to select to MD to playback.
7. Check the waveforms at each point on the servo board.

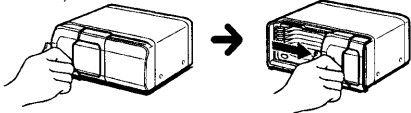
Note: After this check is completed, remove solder between shorted bridge points BP1 and BP2 and open these points.

This section is extracted
from instruction manual.

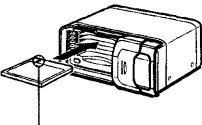
PREPARATIONS (US, Canadian Model)

Preparations

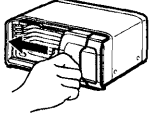
1 Slide the door open until it clicks.
The built-in light inside the compartment will be lit. (If the ignition key is in the OFF position, the light automatically goes out after one minute.)
Ouvrez le panneau frontal en le faisant coulisser jusqu'à ce qu'il s'encliquette.
L'éclairage intégré s'allume à l'intérieur du compartiment. (Si la clé de contact est en position OFF, l'éclairage s'éteint automatiquement au bout d'une minute.)



2 Insert an MD until it clicks.
Introduisez un MD jusqu'à ce qu'il s'encliquette.

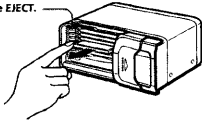


3 Slide the door closed until it clicks.
Refermez le panneau frontal en le faisant coulisser jusqu'à ce qu'il s'encliquette.



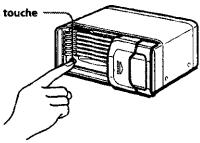
To remove an MD / Pour retirer un MD

Press the EJECT button.
Appuyez sur la touche EJECT.



To remove the MD in the play position / Pour retirer le MD en position de lecture

Press the stop button.
Appuyez sur la touche STOP.



Listening to MDs

Operate the master unit. See the operating instructions of the master unit for details. When you select another disc to play, the volume of the MD that's playing goes down, and the discs change.

Note
The unit does not have the custom file function.

Ecoute d'un MD

Utilisez l'appareil principal. Pour plus de détails, consultez le mode d'emploi de l'appareil principal. Si vous sélectionnez la reproduction d'un autre disque, le volume du MD en cours de lecture baisse et les disques sont changés.

Remarque
L'appareil ne possède pas la fonction de fichier d'utilisateur.

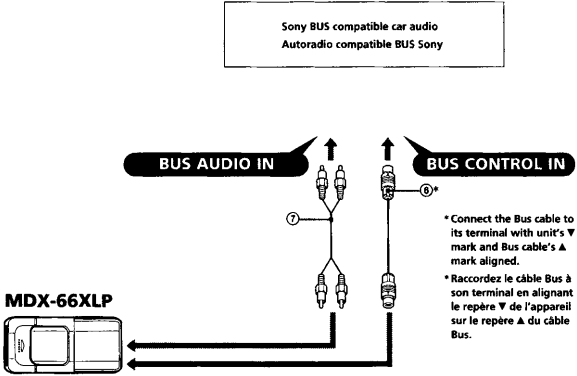
CONNECTIONS (US, Canadian Model)

Connections Connexions

For details, refer to the Installation/Connections manual of each product. Pour plus de détails, consulter le manuel d'installation/connexions de chaque produit.

Connection diagram

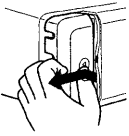
Schéma de connexions



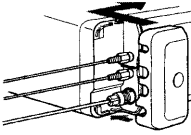
How to detach and attach the protection cover

Comment déposer et installer le couvercle de protection

To detach / Pour enlever



To attach / Pour installer



PREPARATIONS (AEP, UK Model)

Preparations

Préparatifs

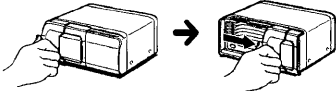
Vorbereitungen

Voorbereiding

Preparazione

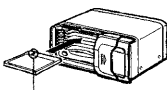
1

Slide the door open until it clicks.
The built-in light inside the compartment will be lit. (If the ignition key is in the OFF position, the light automatically goes out after one minute.)
Ouvrez le panneau frontal en le faisant coulisser jusqu'à ce qu'il s'encliquette.
L'éclairage intégré s'allume à l'intérieur du compartiment. (Si la clé de contact est en position OFF, l'éclairage s'éteint automatiquement au bout d'une minute.)
Öffnen Sie die Klappe, indem Sie sie zur Seite schieben, bis sie einrastet.
Die im Fach eingebaute Leuchte schaltet sich ein. Wenn sich der Zündschlüssel in der Position AUS befindet, erlischt die Leuchte nach einer Minute automatisch.
Schuif het luikje open tot u een klik hoort.
De ingebouwde verlichting brandt. (Met de contactleutel in de stand OFF dooft de verlichting automatisch na een minuut.)
Aprire lo sportello facendolo scorrere fino a udire uno scatto.
La luce incorporata all'interno dello scomparto si accende. Se la chiave di accensione è regolata sulla posizione OFF, la luce si spegne automaticamente dopo un minuto.



2

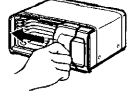
Insert an MD until it clicks.
Introduisez un MD jusqu'à ce qu'il s'encliquette.
Legen Sie eine MD ein. Achten Sie darauf, daß sie einrastet.
Breng een MD in tot u een klik hoort.
Inserire un minidisco fino a udire uno scatto.



Do not reach into the changer to avoid injury.
Cautionary notice for opening and closing the door
If you press on the transparent window too hard, it may break or cause injury.
N'introduisez pas les doigts dans le changeur afin d'éviter tout risque de blessures.
Précaution pour l'ouverture et la fermeture du panneau frontal
Si vous appuyez trop fort sur la fenêtre transparente, vous risquez de la briser ou de vous blesser.
Greifen Sie nicht in den Wechler. Andernfalls besteht Verletzungsgefahr.
Warnhinweis zum Öffnen und Schließen der Klappe
Wenn Sie zu stark auf das durchsichtige Fenster drücken, kann es zerbrechen und Verletzungen verursachen.
Kom niet aan de binnenkant van de wisselaar, want zo kan u zich verwonden.
Let op bij het openen en sluiten van het luikje
Wanneer u te hard op het transparante raam drukt, kan dit breken en verwondingen veroorzaken.
Non introdurre le dita all'interno del cambio MD onde evitare di ferirsi.
Avvertenze per l'apertura e chiusura dello sportello
Se si preme troppo forte sulla finestra trasparente, questa potrebbe rompersi o causare danni.

3

Slide the door closed until it clicks.
Refermez le panneau frontal en le faisant coulisser jusqu'à ce qu'il s'encliquette.
Schließen Sie die Klappe, indem Sie sie wieder zurückschieben, bis sie einrastet.
Schuif het luikje dicht tot u een klik hoort.
Chiudere lo sportello facendolo scorrere fino a udire uno scatto.



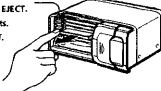
Always use the unit with the door closed.
Otherwise, foreign matter may enter the unit and contaminate the lenses inside the changer.
Note
When an MD is inserted and the door is closed, or the reset button of the connected car audio is pressed, the unit will be automatically activated and read the information on the MDs. After the information on all of the MDs has been read, the unit is ready to play.
Remarque
Lorsqu'un MD est inséré et le volet refermé ou que la touche de réinitialisation de l'auto-radio connecté est enfoncée, l'appareil est automatiquement activé et entame la lecture des informations contenues sur les MD. Lorsque les informations de tous les MD ont été lues, l'appareil est prêt pour la lecture.
Le panneau frontal doit toujours être fermé en cours d'utilisation.
Sinon, des corps étrangers risquent de pénétrer à l'intérieur et de souiller les lentilles du changeur.
Remarque
Lorsqu'un MD est inséré et le volet refermé ou que la touche de réinitialisation de l'auto-radio connecté est enfoncée, l'appareil est automatiquement activé et entame la lecture des informations contenues sur les MD. Lorsque les informations de tous les MD ont été lues, l'appareil est prêt pour la lecture.

Verwenden Sie das Gerät immer nur mit geschlossener Klappe.
Andernfalls können Fremdkörper in das Gerät gelangen und die Linsen im Inneren des Wechlers verschmutzen.
Hinweis
Wenn eine MD eingelegt und die Klappe geschlossen oder die Rücksetztaste an der angeschlossenen Autoanlage gedrückt wird, wird das Gerät automatisch eingeschaltet, und die Informationen auf den MDs werden eingelesen. Wenn die Informationen aller MDs eingelesen wurden, ist das Gerät bereit für die Wiedergabe.
Gebruik het toestel altijd met het luikje dicht.
Anders kunnen vreemde lichamen in het toestel terechtkomen en kunnen de lenzen in de wisselaar vervuild raken.
Opmmerking
Wanneer een MD wordt ingebracht of wanneer de terugzetknop van het aangesloten autoaudiostelsm wordt ingedrukt, schakelt het toestel automatisch in en wordt de informatie op de MD's gelezen. Nadat de informatie op alle MD's is gelezen, is het toestel klaar om te beginnen afspelen.

Utilizzare sempre l'apparecchio con lo sportello chiuso.
Corpi estranei potrebbero penetrare nell'apparecchio e sporcare le lenti interne del cambio MD.
Note
Quando viene inserito un minidisco e lo sportello è chiuso o viene premuto il pulsante di azzeramento dell'autoradio collegata, l'apparecchio si attiva automaticamente e legge i dati dei minidischi. Al termine della lettura di tutti i dati dei minidischi, l'apparecchio è pronto per la riproduzione.

To remove an MD / Pour retirer un MD / Entnehmen einer MD / Een MD uithalen / Estrazione di un minidisco

Press the EJECT button.
Appuyez sur la touche EJECT.
Drücken Sie die Taste EJECT.
Druk op de EJECT-toets.
Premere il tasto EJECT.



You can remove MDs anytime except while one is playing. Vous pouvez retirer des MD à tout moment sauf en cours de lecture. Sie können MDs außer während der Wiedergabe einer MD jederzeit entnehmen. U kan op elk ogenblik MD's uithalen, behalve wanneer er een MD aan het afspelen is. I minidischi possono essere estratti in qualsiasi momento tranne durante la riproduzione.

Notes

- When removing two or more MDs, remove them in order from the upper tray.
- Never press the EJECT button for the MD which is in the play position.

Remarques

- Si vous retirez deux MD ou plus, commencez par le plateau supérieur.
- N'appuyez jamais sur la touche EJECT pour le MD qui se trouve en position de lecture.

Hinweise

- Wenn Sie zwei oder mehr MDs entnehmen, nehmen Sie zunächst die in den weichen ober liegenden Fächern heraus.
- Drücken Sie die Taste EJECT nicht für die MD, die sich an der Wiedergabe position befindet.

Opmmerkingen

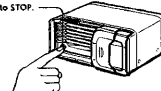
- Wanneer u twee of meer MD's uit haalt, neem ze dan achtereen volgens van boven naar onder uit.
- Druk niet op de EJECT-toets in de afspelstand.

Note

- Quando si estraggono due o più minidischi, procedere all'estrazione a partire dal contenitore più alto.
- Non premere il tasto EJECT quando l'MD è in posizione di riproduzione.

To remove the MD in the play position / Pour retirer le MD en position de lecture / Entnehmen einer MD an der Wiedergabe position / De MD verwijderen in de weergavestand / Estrazione di un minidisco pronto per la riproduzione

Press the stop button.
Appuyez sur la touche STOP.
Drücken Sie die Taste STOP.
Druk op de STOP-toets.
Premere il tasto STOP.



The MD goes to the loading position. Press the EJECT button, and remove the MD. You can also remove an MD in this way while it's playing. Le MD passe en position de chargement. Appuyez sur la touche EJECT et retirez le MD. Vous pouvez également retirer un MD de cette façon lorsqu'il est en cours de lecture. Die MD wird an die Einlegeposition. Drücken Sie die Taste EJECT, und nehmen Sie die MD heraus. Auf diese Art können Sie eine MD herausnehmen, die gerade abgespielt wird bzw. die sich an der Wiedergabe position befindet. De MD gaat naar de laadpositie. Druk op de EJECT-toets en verwijder de MD. Zo kan u een MD verwijderen terwijl hij aan het afspelen is. Il minidisco passa alla posizione di caricamento. Premere il tasto EJECT ed estrarre il minidisco. Seguire questa procedura per estrarre un minidisco pronto per la riproduzione o in fase di riproduzione.

Notes

- Do not insert an MD with the label facing downward.
- Make sure the MD's shutter is closed before inserting it into the magazine.

Remarques

- N'introduisez pas un MD avec l'étiquette vers le bas.
- Assurez-vous que le volet du MD est fermé avant de l'introduire dans le magasin.

Hinweise

- Legen Sie eine MD nicht mit der Beschriftung nach unten ein.
- Achten Sie darauf, daß der Verschluss der MD geschlossen ist, bevor Sie sie in das Magazin einlegen.

Opmmerkingen

- Breng de MD niet in met het label naar onderen gericht.
- Controleer of de sluiters van de MD gesloten is voordat u de MD in de lader brengt.

Note

- Non inserire minidischi con l'etichetta rivolta verso il basso.
- Accertarsi che l'arturatore del minidisco sia chiuso prima di collocarlo nel contenitore.

Listening to MDs

Operate the master unit. See the operating instructions of the master unit for details. When you select another disc to play, the volume of the MD that's playing goes down, and the disc change.

Note
The unit does not have the custom file function.

Ecoute d'un MD

Utilisez l'appareil principal. Pour plus de détails, consultez le mode d'emploi de l'appareil principal. Si vous sélectionnez la reproduction d'un autre disque, le volume du MD en cours de lecture baisse et les disques sont changés.

Remarque
L'appareil ne possède pas la fonction de fichier d'utilisateur.

Wiedergeben von MDs

Starten Sie die Wiedergabe am Hauptgerät. Einzelheiten dazu finden Sie in der Bedienungsanleitung zum Hauptgerät. Wenn Sie eine andere MD für die Wiedergabe auswählen, wird die Lautstärke bei der Wiedergabe der aktuellen MD herabgesetzt, und die MD wird gewechselt.

Hinweis
Das Gerät verfügt nicht über die Custom File-Function.

MD's beluisteren

Schakel het hoofdtoestel in. Voor meer informatie verwijzen wij u naar de handleiding van het hoofdtoestel. Wanneer u een andere disc selecteert, vermindert het volume van de MD die aan het afspelen is en worden de discs verwisseld.

Opmmerking
Het toestel is niet uitgerust met de custom file-functie.

Ascolto di minidischi

Attivare l'apparecchio centrale. Per maggiori dettagli, leggere le istruzioni d'uso relative all'apparecchio centrale. Quando si seleziona un altro disco da riprodurre, il volume del minidisco in fase di riproduzione si attenua e avviene lo scambio di dischi.

Note
L'apparecchio non è dotato della funzione di personalizzazione dei file.

CONNECTIONS (AEP, UK Model)

Connections

For details, refer to the installation/Connections manual of each product.

Connexions

Pour plus de détails, consultez le manuel d'installation/connexions de chaque produit.

Anschluß

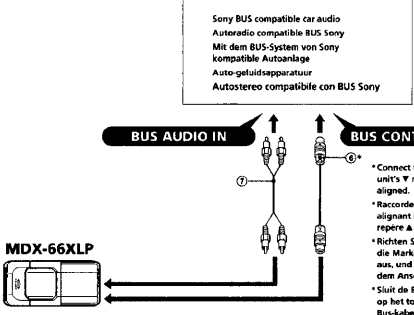
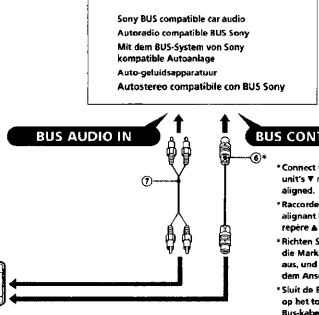
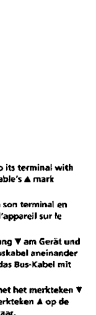
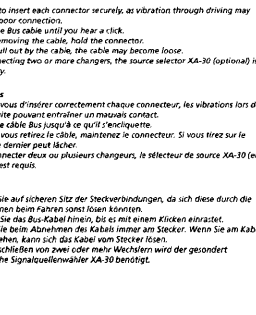
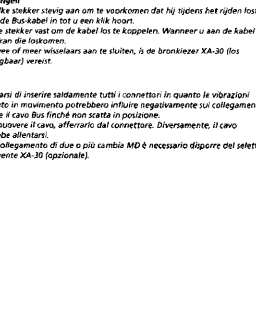
Einzelheiten entnehmen Sie der Installations/Anschlußanleitung des betreffenden Geräts.

Aansluitingen

Zie voor nadere bijzonderheden de gebruiksaanwijzing voor installatie en aansluitingen van de aan te sluiten apparatuur.

Collegamenti

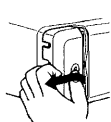
Per i dettagli, fare riferimento al manuale di installazione/collegamenti di ciascun prodotto.

Connection diagram	Schéma de connexions	Anschlußdiagramm	Aansluitingsschema	Schema di collegamento
 <p>BUS AUDIO IN</p> <p>BUS CONTROL IN</p> <p>MDX-66XLP</p>	 <p>BUS AUDIO IN</p> <p>BUS CONTROL IN</p> <p>MDX-66XLP</p>	 <p>BUS AUDIO IN</p> <p>BUS CONTROL IN</p> <p>MDX-66XLP</p>	 <p>BUS AUDIO IN</p> <p>BUS CONTROL IN</p> <p>MDX-66XLP</p>	 <p>BUS AUDIO IN</p> <p>BUS CONTROL IN</p> <p>MDX-66XLP</p>

How to detach and attach the protection cover

Before connecting the cords, detach the protection cover.

To detach
Dépose
Abnehmen
Verwijderen
Rimozione



Pose et dépose du couvercle de protection

Avant de brancher les câbles, déposez le couvercle de protection.

Pose et dépose du couvercle de protection
Avant de brancher les câbles, déposez le couvercle de protection.
Enfoncer et dégage le couvercle de protection.
Drücken Sie an dieser Stelle, und ziehen Sie die Schutzabdeckung ab.
Het beschermdoekje indrukken en wegschuiven.
Premere e far scorrere il coperchio di protezione sino ad estrarlo.

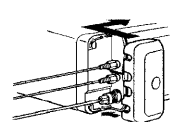
Abnehmen und Anbringen der Schutzabdeckung

Bevor Sie die Kabel anschließen, nehmen Sie die Schutzabdeckung ab.

To attach
Pose
Anbringen
Bevestigen
Applicazione

Verwijderen en bevestigen van het beschermdoekje

Vooraf u de kabels aansluiten, moet u het beschermdoekje verwijderen.

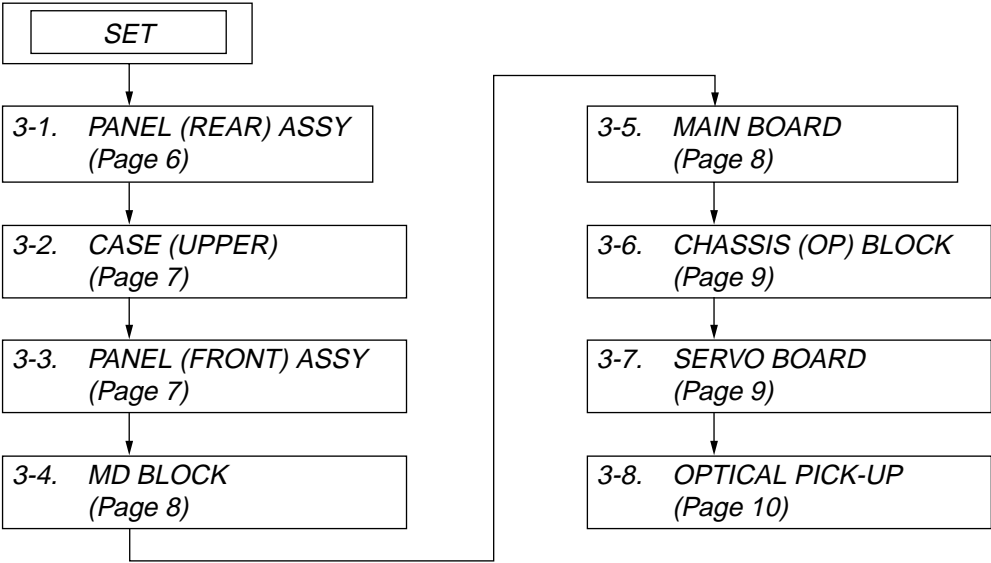


Rimozione e applicazione del coperchio di protezione

Prima di collegare i cavi, rimuovere il coperchio di protezione.

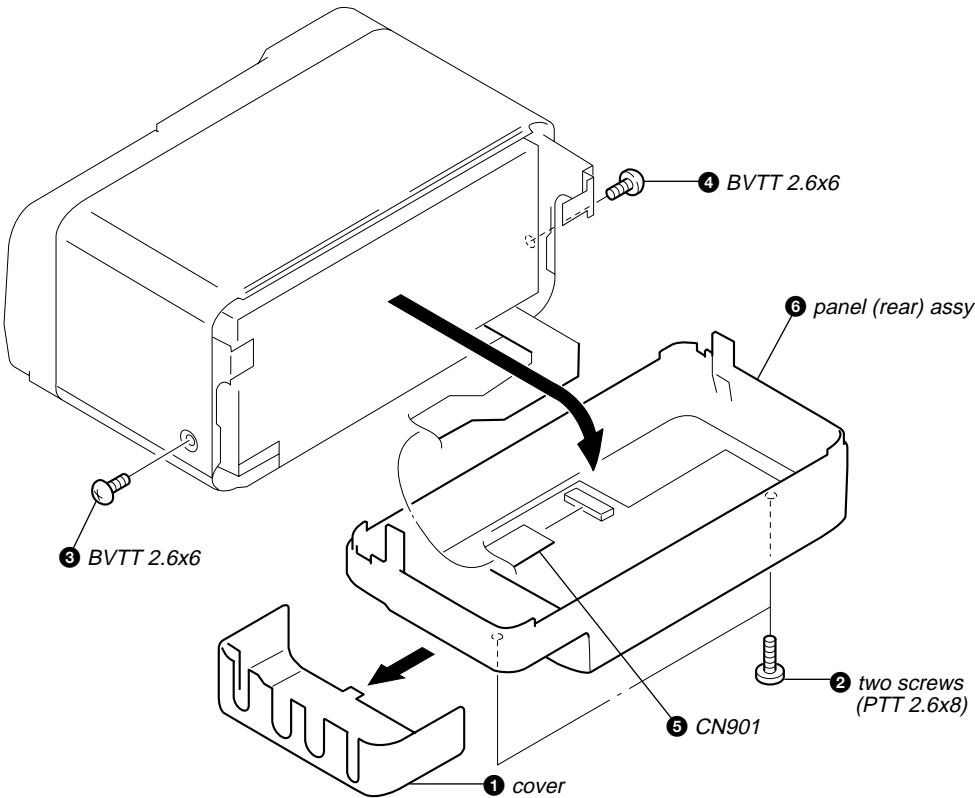
SECTION 3
DISASSEMBLY

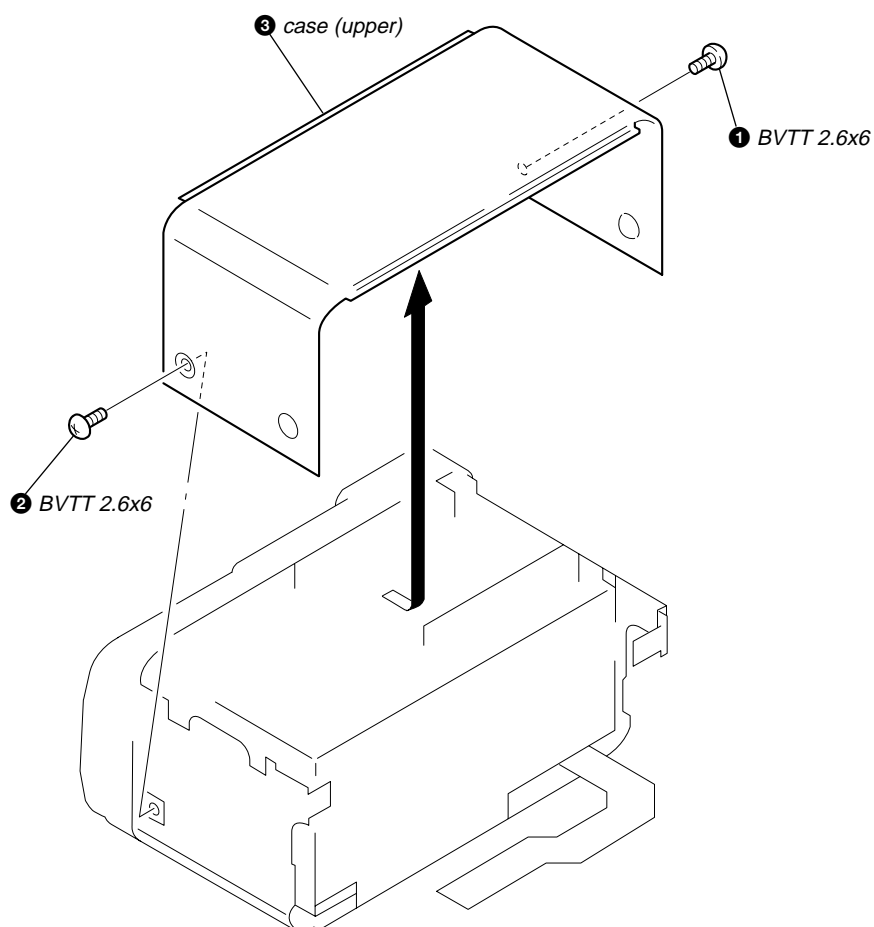
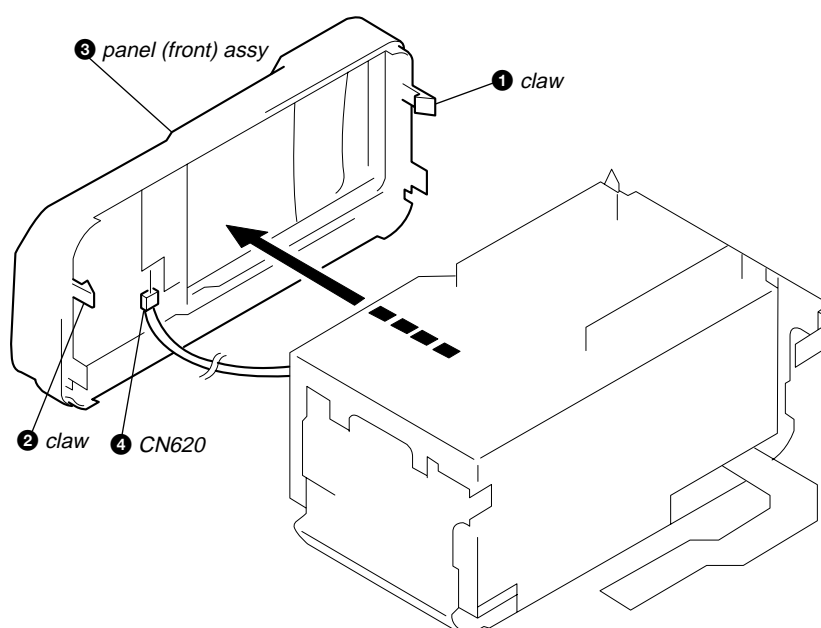
Note : This set can be disassemble according to the following sequence.



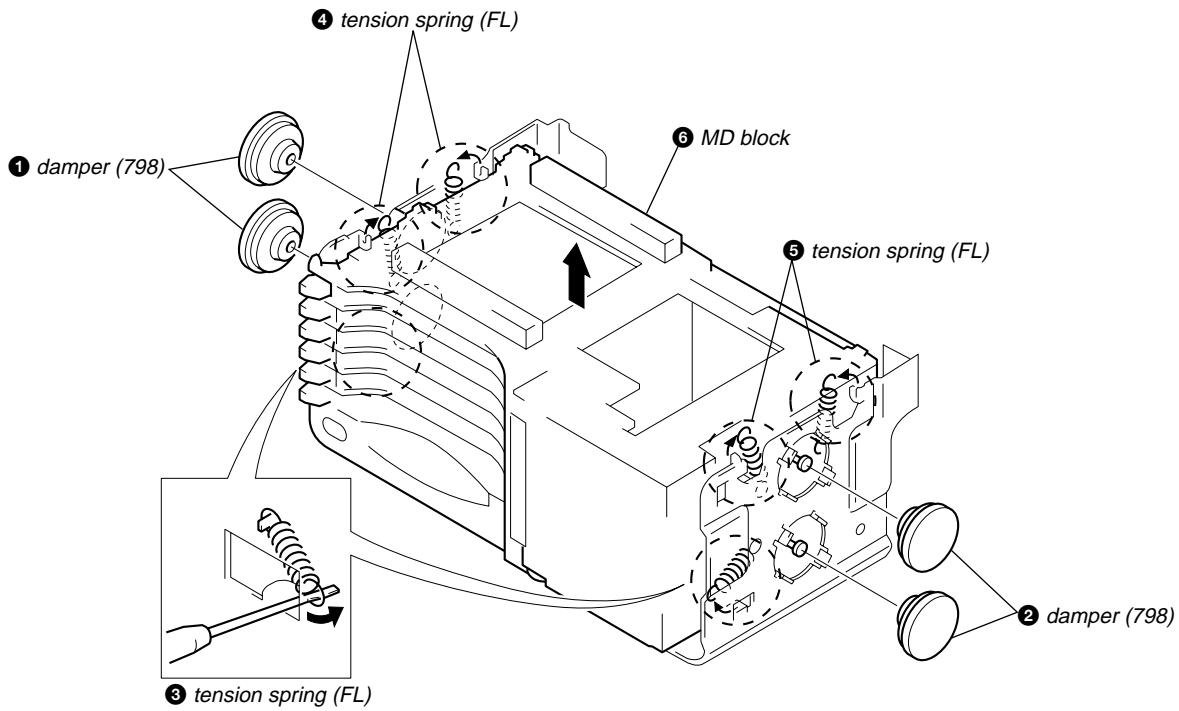
Note : Follow the disassembly procedure in the numerical order given.

3-1. PANEL (REAR) ASSY

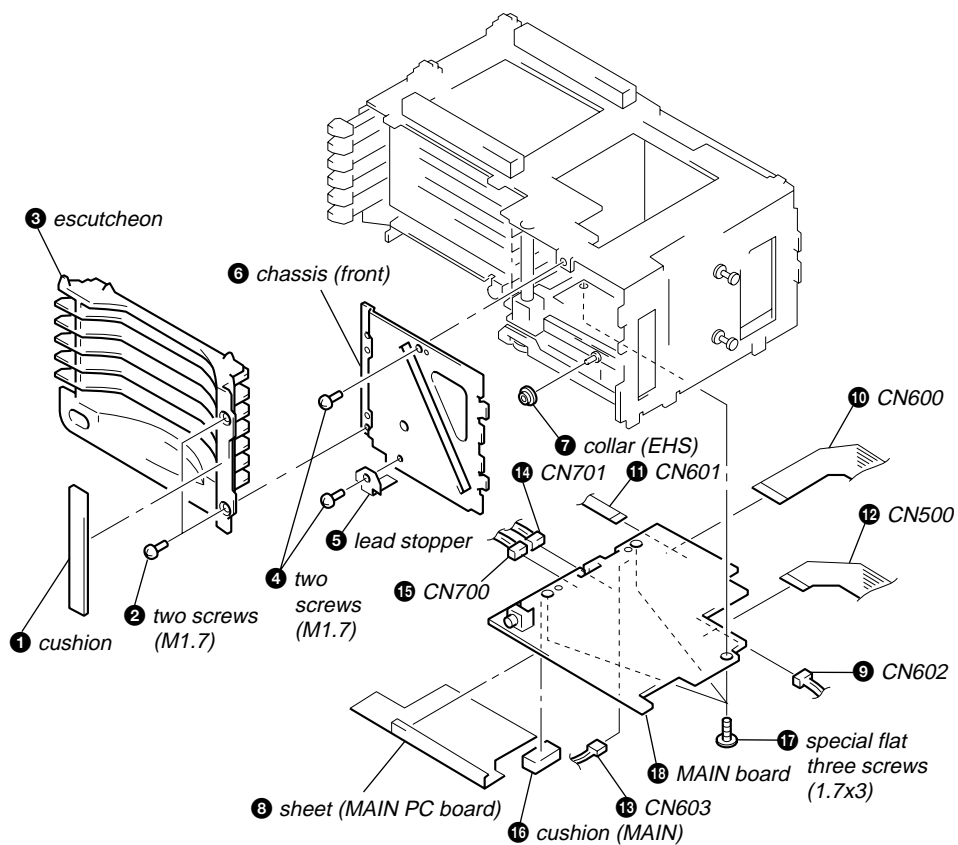


3-2. CASE (UPPER)**3-3. PANEL (FRONT) ASSY**

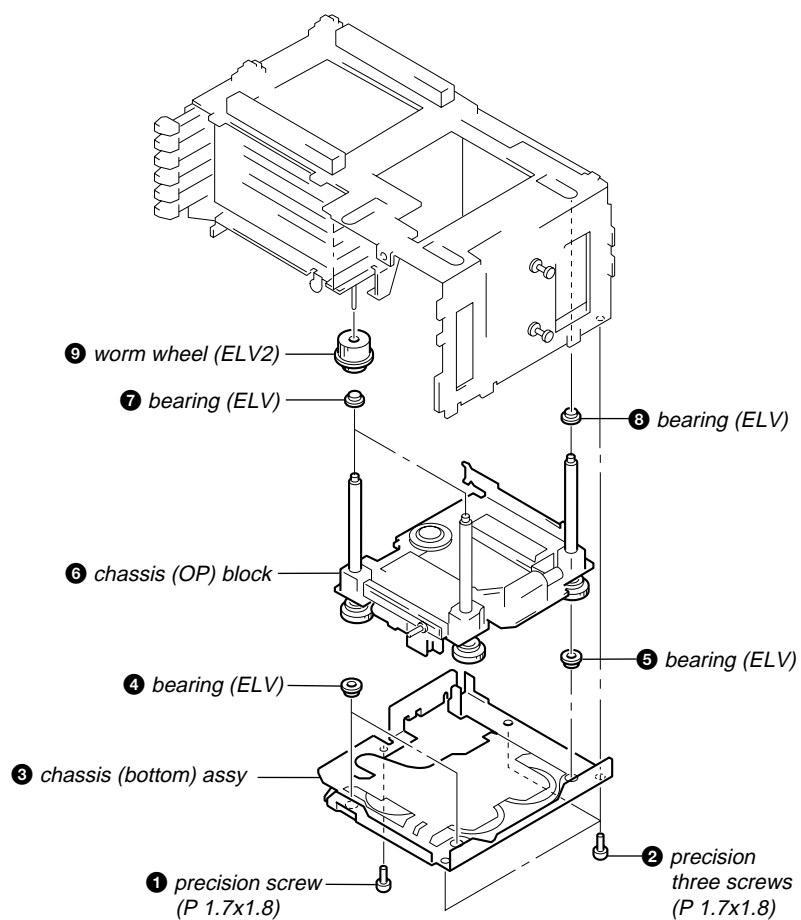
3-4. MD BLOCK



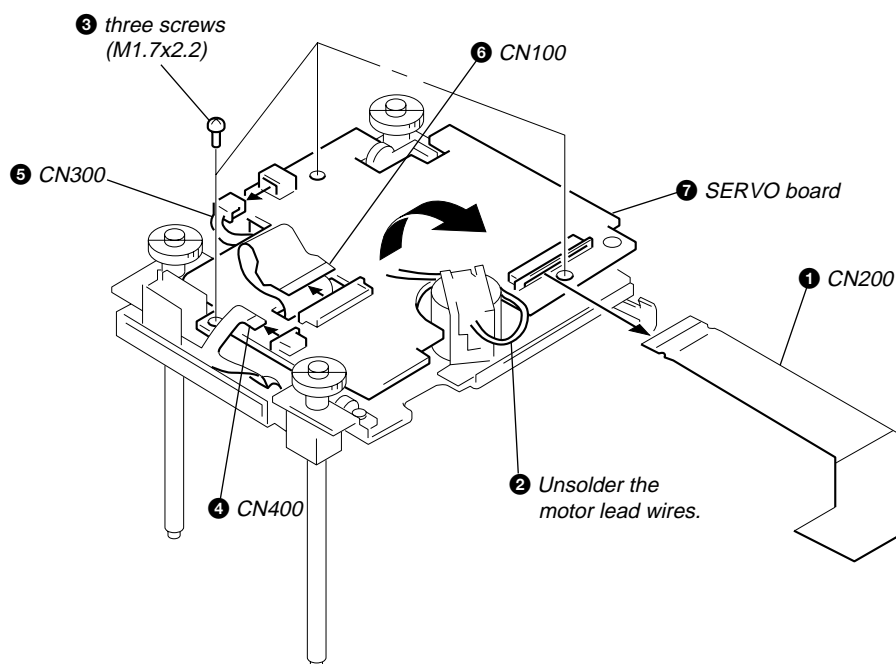
3-5. MAIN BOARD



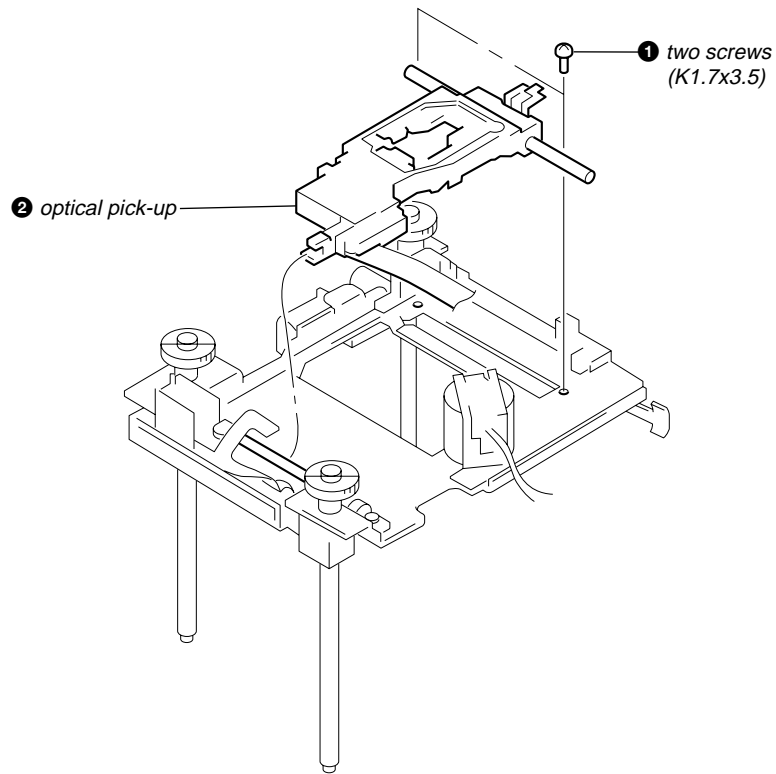
3-6. CHASSIS (OP) BLOCK



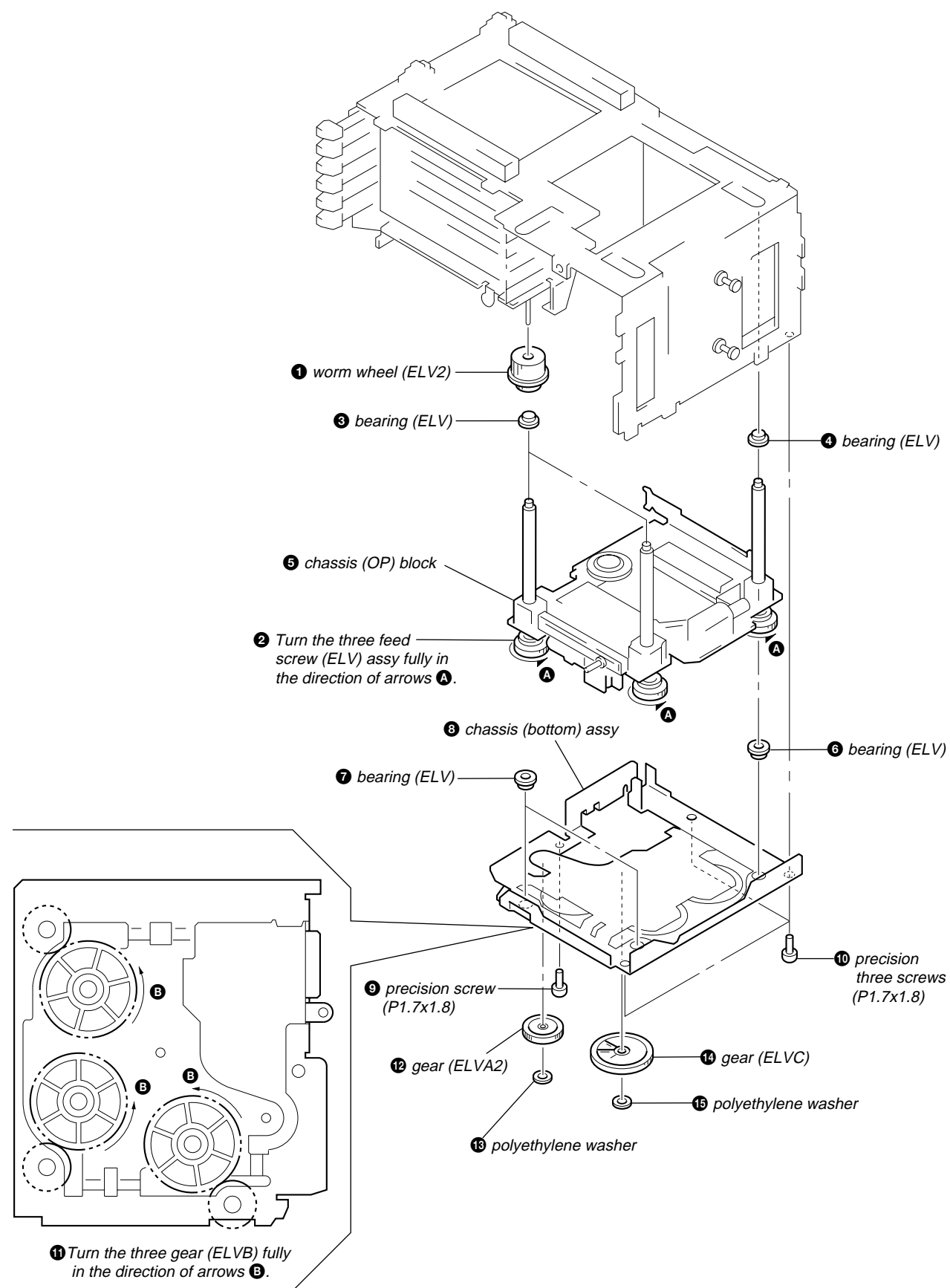
3-7. SERVO BOARD



3-8. OPTICAL PICK-UP



3-9. NOTE ON ASSEMBLY FOR THE CHASSIS (OP) BLOCK



SECTION 4 DIAGRAMS

4-1. IC PIN DESCRIPTIONS

• IC100 CXA2523AR (RF AMP)

Pin No.	Pin Name	I/O	Pin Description
1	I	I	I-V converted RF signal input (I) from detector of optical pick-up
2	J	I	I-V converted RF signal input (J) from detector of optical pick-up
3	VC	O	Center voltage (+1.65 V) generation output
4 – 9	A – F	I	Signal input (A to F) from detector of optical pick-up
10	PD	I	Quantity monitor input of light from laser diode of optical pick-up
11	APC	O	Laser amplifier output to automatic power control circuit
12	APCREF	I	Reference voltage input for laser power setting
13	GND	—	Ground pin
14	TEMPI	I	Temperature sensor connecting pin (Not used in this set.)
15	TEMPR	O	Reference voltage output for temperature sensor (Not used in this set.)
16	SWDT	I	Write data signal input from System controller (IC600)
17	SCLK	I	Serial clock signal input from System controller (IC600)
18	XLAT	I	Serial latch signal input from System controller (IC600)
19	XSTBY	I	Standby signal input (“L” : Standby) (Fixed at “H” in this set.)
20	FOCNT	I	Center frequency control voltage input of internal circuit filter (BPF22, BPF3T and EQ)
21	VREF	O	Reference voltage output (Not used in this set.)
22	EQADJ	I	Center frequency setting input of internal circuit filter (EQ)
23	3TADJ	I	Center frequency setting input of internal circuit filter (BPF3T)
24	VCC	—	Power supply pin (+3.3 V)
25	WBLADJ	I	Center frequency setting input of internal circuit filter (BPF22)
26	TE	O	Tracking error signal output to CXD2662R (IC200)
27	CSLED	I	Connecting pin for low pass filter condenser of sled error signal
28	SE	O	Sled error signal output to CXD2662R (IC200)
29	ADFM	O	FM signal output of ADIP
30	ADIN	I	FM signal input of ADIP by AC combination
31	ADAGC	I	External condenser connecting pin for AGC of ADIP
32	ADFG	O	ADIP double FM signal output (22.05 kHz \pm 1 kHz) to CXD2662R (IC200)
33	AUX	O	Support signal (I3 signal/temperature signal) output (Not used in this set.)
34	FE	O	Focus error signal output to CXD2662R (IC200)
35	ABCD	O	Quantity signal output of light to CXD2662R (IC200)
36	BOTM	O	Bottom hold signal output of quantity signal (RF/ABCD) of light to CXD2662R (IC200)
37	PEAK	O	Peak hold signal output of quantity signal (RF/ABCD) of light to CXD2662R (IC200)
38	RF	O	Playback EFM RF signal output to CXD2662R (IC200)
39	RFAGC	I	External condenser connecting pin of AGC circuit for RF
40	AGCI	I	RF signal input by AC combination
41	COMPO	O	User comparator output pin (Not used in this set.)
42	COMPP	I	User comparator input pin (Fixed at “L” in this set.)
43	ADDC	I	External condenser connecting pin for low frequency interception of ADIP amplifier
44	OPO	O	External condenser connect pin for lower cut of ADIP amplifier
45	OPN	I	User operational amplifier inversion input pin (Fixed at “L” in this set.)
46	RFO	O	RF signal output
47	MORFI	I	RF signal input of MO by AC combination
48	MORFO	O	RF signal output of MO

• SERVO BOARD IC200 CXD2662R (DIGITAL SERVO SIGNAL PROCESSOR, DIGITAL SIGNAL PROCESSOR)

Pin No.	Pin Name	I/O	Pin Description
1	MNT0 (FOK)	O	Focus OK signal output to the MD mechanism controller (IC600) “H” is output when focus is on (“L”: NG)
2	MNT1 (SHOCK)	O	Track jump detection signal output to the MD mechanism controller (IC600)
3	MNT2 (XBUSY)	O	Busy monitor signal output to the MD mechanism controller (IC600)
4	MNT3 (SLOCK)	O	Spindle servo lock status monitor signal output to the MD mechanism controller (IC600)
5	SWDT	I	Writing serial data signal input from the MD mechanism controller (IC600)
6	SCLK	I (S)	Serial data transfer clock signal input from the MD mechanism controller (IC600)
7	XLAT	I (S)	Serial data latch pulse signal input from the MD mechanism controller (IC600)
8	SRDT	O (3)	Reading serial data signal output to the MD mechanism controller (IC600)
9	SENS	O (3)	Internal status (SENSE) output to the MD mechanism controller (IC600)
10	$\overline{\text{XRST}}$	I (S)	Reset signal input from the MD mechanism controller (IC600) “L”: reset
11	SQSY	O	Subcode Q sync (SCOR) output to the MD mechanism controller (IC600) “L” is output every 13.3 msec Almost all, “H” is output
12	DQSY	O	Digital In U-bit CD format subcode Q sync (SCOR) output “L” is output every 13.3 msec Almost all, “H” is output Not used (open).
13	RECP	I	Laser power selection signal input “L”: playback mode, “H”: recording mode Not used (fixed at “L”).
14	XINT	O	Interrupt status output to the MD mechanism controller (IC600)
15	TX	I	Recording data output enable signal input Writing data transmission timing input (Also serves as the magnetic head on/off output) Not used (fixed at “L”).
16	OSCI	I	System clock signal (512 Fs = 22.5792 MHz) input terminal
17	OSCO	O	System clock signal (512 Fs = 22.5792 MHz) output terminal Not used (open)
18	XTSL	I	Input terminal for the system clock frequency setting “L”: 45.1584 MHz, “H”: 22.5792 MHz (fixed at “L” in this set.)
19	DIN0	I	Digital audio signal input terminal when recording mode (for digital optical input) Not used.
20	DIN1	I	Digital audio signal input terminal when recording mode (for digital optical input) Not used.
21	DOUT	O	Digital audio signal output terminal when playback mode (for digital optical output)
22	DATAI	I	Serial data input terminal Not used (fixed at “L”).
23	LRCKI	I	L/R sampling clock signal (44.1 kHz) input terminal Not used (fixed at “L”).
24	XBCKI	I	Bit clock signal (2.8224 MHz) input terminal Not used (fixed at “L”).
25	ADDT	I	Recording data input Not used (fixed at “L”).
26	DADT	O	Playback data output to the A/D, D/A converter (IC500)
27	LRCK	O	L/R sampling clock signal (44.1 kHz) output to the A/D, D/A converter (IC500)
28	XBCK	O	Bit clock signal (2.8224 MHz) output to the A/D, D/A converter (IC500)
29	FS256	O	Clock signal (11.2896 MHz) output to the A/D, D/A converter (IC500)
30	DVDD	—	Power supply terminal (+3.3 V) (digital system)
31 – 34	A03 – A00	O	Address signal output to the D-RAM (IC201)
35	A10	O	Address signal output to the external D-RAM Not used (open).
36 – 40	A04 – A08	O	Address signal output to the D-RAM (IC201)
41	A11	O	Address signal output Not used (open).
42	DVSS	—	Ground terminal (digital system)
43	XOE	O	Output enable signal output to the D-RAM (IC201) “L” active
44	XCAS	O	Column address strobe signal output to the D-RAM (IC201) “L” active
45	A09	O	Address signal output to the D-RAM (IC201)

Pin No.	Pin Name	I/O	Pin Description
46	XRAS	O	Row address strobe signal output to the D-RAM (IC201) “L” active
47	XWE	O	Write enable signal output to the D-RAM (IC201) “L” active
48	D1	I/O	Two-way data bus with the D-RAM (IC201)
49	D0	I/O	
50	D2	I/O	
51	D3	I/O	
52	MDDT1	I (S)	Digital in PLL oscillation input from the external VCO Not used (fixed at “L”).
53	ASYO	O	Playback EFM full-swing output terminal
54	ASYI	I (A)	Playback EFM asymmetry comparator voltage input terminal
55	AVDD	—	Power supply terminal (+3.3 V) (analog system)
56	BIAS	I (A)	Playback EFM asymmetry circuit constant current input terminal
57	RFI	I (A)	Playback EFM RF signal input from the CXA2523AR (IC100)
58	AVSS	—	Ground terminal (analog system)
59	PCO	O (3)	Phase comparison output for master clock of the recording/playback EFM master PLL
60	FILI	I (A)	Filter input for master clock of the recording/playback master PLL
61	FILO	O (A)	Filter output for master clock of the recording/playback master PLL
62	CLTV	I (A)	Internal VCO control voltage input of the recording/playback master PLL
63	PEAK	I (A)	Light amount signal (RF/ABCD) peak hold input from the CXA2523AR (IC100)
64	BOTM	I (A)	Light amount signal (RF/ABCD) bottom hold input from the CXA2523AR (IC100)
65	ABCD	I (A)	Light amount signal (ABCD) input from the CXA2523AR (IC100)
66	FE	I (A)	Focus error signal input from the CXA2523AR (IC100)
67	AUX1	I (A)	Auxiliary signal (I ₃ signal/temperature signal) input from the CXA2523AR (IC100)
68	VC	I (A)	Middle point voltage (+1.65 V) input from the CXA2523AR (IC100)
69	ADIO	O (A)	Monitor output of the A/D converter input signal Not used (open).
70	AVDD	—	Power supply terminal (+3.3 V) (analog system)
71	ADRT	I (A)	A/D converter operational range upper limit voltage input terminal (fixed at “H” in this set)
72	ADRB	I (A)	A/D converter operational range lower limit voltage input terminal (fixed at “L” in this set)
73	AVSS	—	Ground terminal (analog system)
74	SE	I (A)	Sled error signal input from the CXA2523AR (IC100)
75	TE	I (A)	Tracking error signal input from the CXA2523AR (IC100)
76	DCHG	I (A)	Connected to the +3.3 V power supply
77	APC	I (A)	Error signal input for the laser automatic power control Not used (fixed at “H”).
78	ADFG	I (S)	ADIP duplex FM signal (22.05 kHz \pm 1 kHz) input from the CXA2523AR (IC100)
79	F0CNT	O	Filter f0 control signal output Not used (open).
80	XLRF	O	Serial data latch pulse signal output Not used (open).
81	CKRF	O	Serial data transfer clock signal output Not used (open).
82	DTRF	O	Writing serial data output Not used (open).
83	APCREF	O	Control signal output to the reference voltage generator circuit for the laser automatic power control
84	LDDR	O	PWM signal output for the laser automatic power control Not used (open).
85	TRDR	O	Tracking servo drive PWM signal (–) output to the MPC17A36VMEL (IC300)
86	TFDR	O	Tracking servo drive PWM signal (+) output to the MPC17A36VMEL (IC300)
87	DVDD	—	Power supply terminal (+3.3 V) (digital system)
88	FFDR	O	Focus servo drive PWM signal (+) output to the MPC17A36VMEL (IC300)
89	FRDR	O	Focus servo drive PWM signal (–) output to the MPC17A36VMEL (IC300)
90	FS4	O	Clock signal (176.4 kHz) output terminal (X’tal system) Not used (open).

Pin No.	Pin Name	I/O	Pin Description
91	SRDR	O	Sled servo drive PWM signal (–) output to the MPC17A36VMEL (IC300)
92	SFDR	O	Sled servo drive PWM signal (+) output to the MPC17A36VMEL (IC300)
93	SPRD	O	Spindle servo drive PWM signal (–) output to the MPC17A36VMEL (IC300)
94	SPFD	O	Spindle servo drive PWM signal (+) output to the MPC17A36VMEL (IC300)
95	FGIN	I (S)	Input terminal for the test (fixed at “L”).
96	TEST1	I	
97	TEST2	I	
98	TEST3	I	
99	DVSS	—	Ground terminal (digital system)
100	EFMO	O	EFM signal output terminal when recording mode Not used (open).

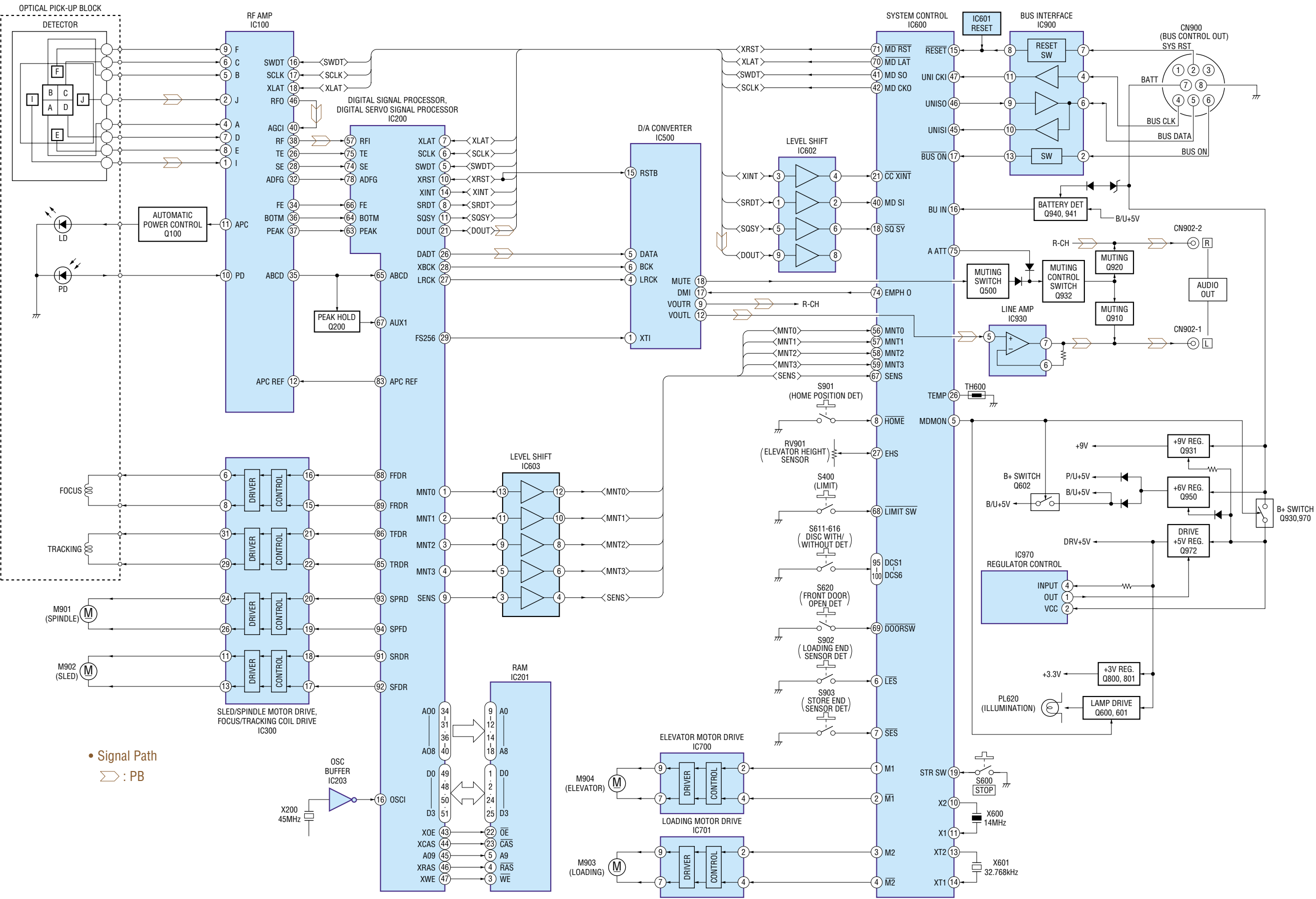
* I (S) stands for schmitt input, I (A) for analog input, O (3) for 3-state output, and O (A) for analog output in the column I/O.

• IC600 μ PD784216AGC-151-8EU (SYSTEM CONTROL)

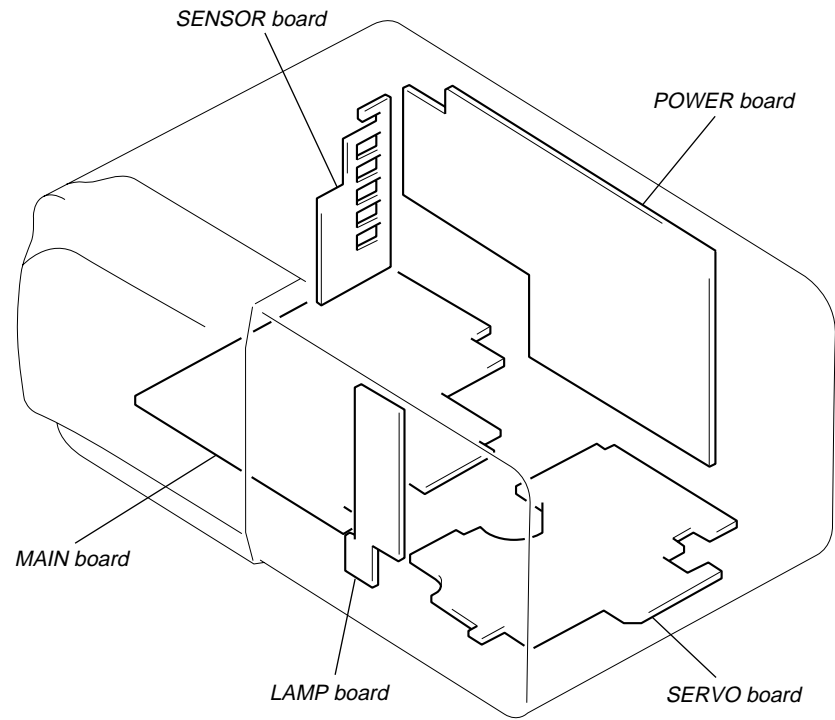
Pin No.	Pin Name	I/O	Pin Description
1	M1	O	Elevator motor (M904) drive signal output
2	$\overline{M1}$	O	Elevator motor (M904) drive signal output
3	M2	O	Loading motor (M903) drive signal output
4	$\overline{M2}$	O	Loading motor (M903) drive signal output
5	MDMON	O	Mechanism deck system power control output (“H” : Power ON)
6	\overline{LES}	I	Loading end sensor detection switch (S902) input
7	\overline{SES}	I	Store end sensor detection switch (S903) input
8	\overline{HOME}	I	Home position detection switch (S901) input (“L” : Home position)
9	VDD	—	Power supply pin (+5 V)
10	X2	—	Main system clock connecting pin (14 MHz)
11	X1	—	Main system clock connecting pin (14 MHz)
12	VSS	—	Ground pin
13	XT2	—	Sub system clock connecting pin (32.768 kHz)
14	XT1	—	Sub system clock connecting pin (32.768 kHz)
15	\overline{RESET}	—	System reset input
16	BU IN	I	Backup OFF detection input (“L” : Backup OFF)
17	$\overline{BUS ON}$	I	BUS OFF detection of SONY BUS (“H” : BUS OFF)
18	$\overline{SQ SY}$	I	Sub code Q sync input from CXD2662R (IC200)
19	STR SW	I	STOP switch (S600) input
20	—	O	Not used.
21	$\overline{CC XINT}$	I	Interruption status input from CXD2662R (IC200)
22	—	O	Not used.
23	AVDD	—	Power supply for A/D converter (+5 V)
24	AVREF0	—	Reference voltage for A/D converter
25	INIT	I	Initial input pin at reset (Not used in this set.)
26	TEMP	I	Thermistor connecting pin for temperature detection
27	EHS	I	Elevator height position detection input
28, 29	—	I	Connect to ground.
30 – 32	—	I	Connect to ground.
33	AVSS	—	Analog ground
34	ERR PWM	O	Error data output (Not used in this set.)
35	—	O	Not used.
36	AVREF1	—	Reference voltage for D/A converter
37, 38	—	O	Not used.
39	—	O	Not used.
40	MD SI	I	Read data signal input from CXD2662R (IC200)
41	MD SO	O	Write data signal output to CXA2523AR (IC100) and CXD2662R (IC200)
42	MD CKO	O	Serial clock signal output to CXA2523AR (IC100) and CXD2662R (IC200)
43	—	O	Not used.
44	—	O	Not used.
45	UNISI	I	Serial data input for SONY BUS
46	UNISO	O	Serial data output for SONY BUS
47	UNI CKI	I	Serial clock input for SONY BUS
48	LINKOFF	O	Link control signal output for SONY BUS (“H” : Link OFF) (Not used in this set.)
49	—	O	Not used.
50	—	I	Not used.
51, 52	D-BASS1, 2	O	Digital D-BASS select output 1, 2 (Not used in this set.)
53 – 55	—	O	Not used.
56 – 59	MNT0 – 3	I	Monitor 0 – 3 signal input from CXD2662R (IC200)
60	AGING	O	Not used.
61	AGCHK	O	Not used.
62	TFTON	O	Not used.

Pin No.	Pin Name	I/O	Pin Description
63	—	O	Not used.
64	EE CS	O	Chip select output to EEPROM (Not used in this set.)
65	EE CKO	O	Serial clock output to EEPROM (Not used in this set.)
66	EE SIO	I/O	Data input/output to EEPROM (Not used in this set.)
67	SENS	I	Internal status input from CXD2662R (IC200)
68	LIMIT SW	I	Optical pick-up innermost track limit position detection switch (S400) input
69	DOORSW	I	Front door open detection switch (S620) input (“L” : Open complete)
70	MD LAT	O	Serial latch signal output to CXA2523AR (IC100) and CXD2662R (IC200)
71	MD RST	O	Reset signal output to CXD2662R (IC200)
72	VSS	—	Ground pin
73	MD ON	O	Servo system power control output (“H” : Power ON) (Not used in this set.)
74	EMPH O	O	De-emphasis circuit control output (“H” : De-emphasis ON)
75	A ATT	O	Analog mute control output (“H” : Mute ON)
76	ILLON	O	Illumination lamp light-up control output (“H” : Lamp light-up) (Not used in this set.)
77	TSTSMD	I	Single mode setting pin (“L” : Single mode)
78	TSTCKO	O	Serial clock output to LED for TEST mode display (Not used in this set.)
79	TSTSO	O	Serial data output to LED for TEST mode display (Not used in this set.)
80	TSTMOD	I	TEST mode setting pin (“L” : TEST mode)
81	VDD	—	Power supply pin (+5 V)
82 – 85	TSTOUT0 – 3	O	TEST key output pin of 4 × 8 matrix (Not used in this set.)
86 – 93	TSTIN0 – 7	I	TEST key input pin of 4 × 8 matrix (Not used in this set.)
94	TEST/VPP	—	Fixed at “L” in this set.
95	DCS1	I	Disc with/without detection 1 switch (S611) input (“H” : with disc)
96	DCS2	I	Disc with/without detection 2 switch (S612) input (“H” : with disc)
97	DCS3	I	Disc with/without detection 3 switch (S613) input (“H” : with disc)
98	DCS4	I	Disc with/without detection 4 switch (S614) input (“H” : with disc)
99	DCS5	I	Disc with/without detection 5 switch (S615) input (“H” : with disc)
100	DCS6	I	Disc with/without detection 6 switch (S616) input (“H” : with disc)

4-2. BLOCK DIAGRAM



4-3. CIRCUIT BOARDS LOCATION



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

for schematic diagram:

- All capacitors are in μF unless otherwise noted. pF: $\mu\mu\text{F}$
50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- % : indicates tolerance.
- : panel designation.

Note:
The components identified by mark \triangle or dotted line with mark \triangle are critical for safety.
Replace only with part number specified.

Note:
Les composants identifiés par une marque \triangle sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

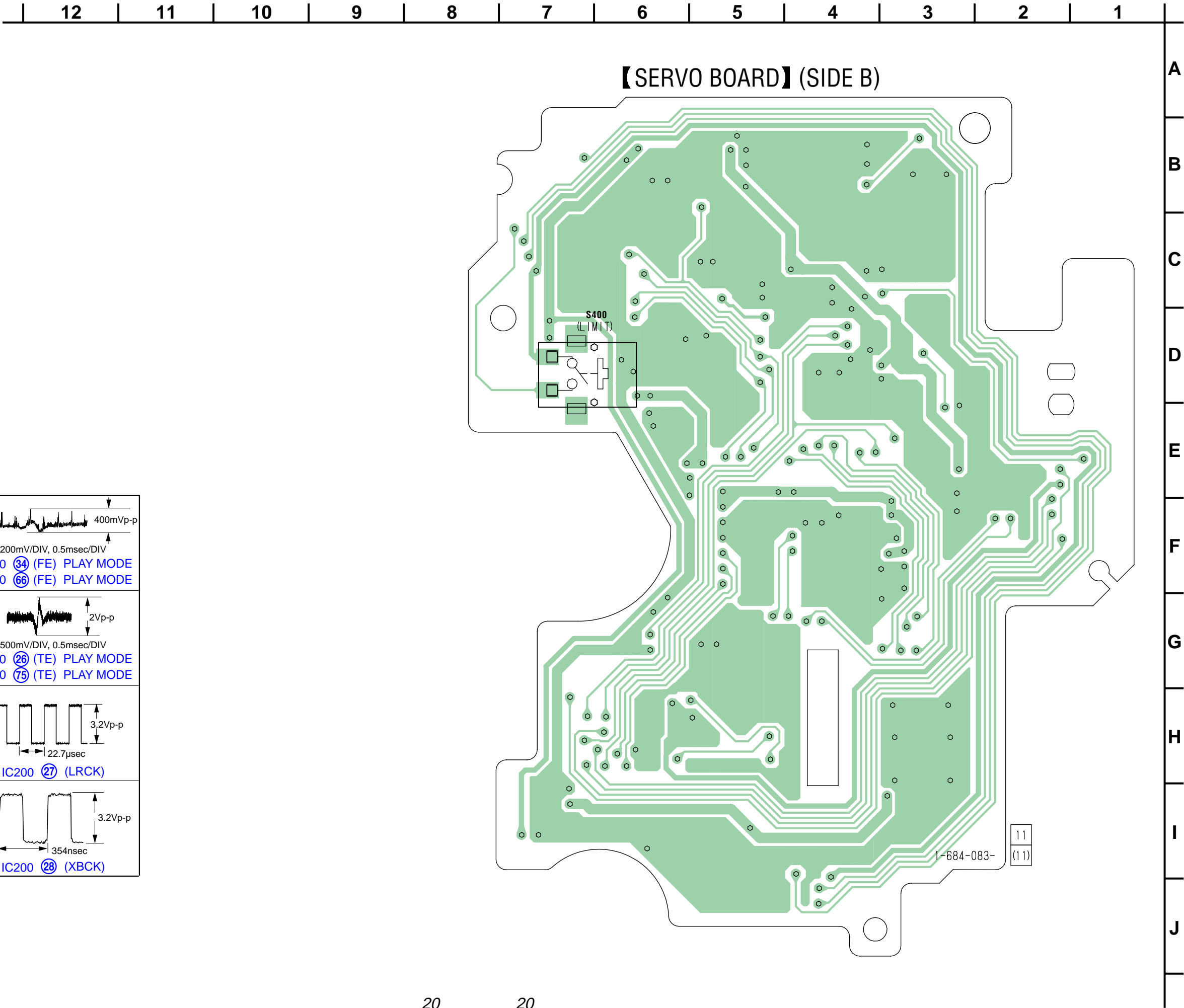
- — : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from Master unit.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : PB
* : Impossible to measure
- Voltages are taken with a VOM (Input impedance $10\text{M}\Omega$).
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
Σ : PB

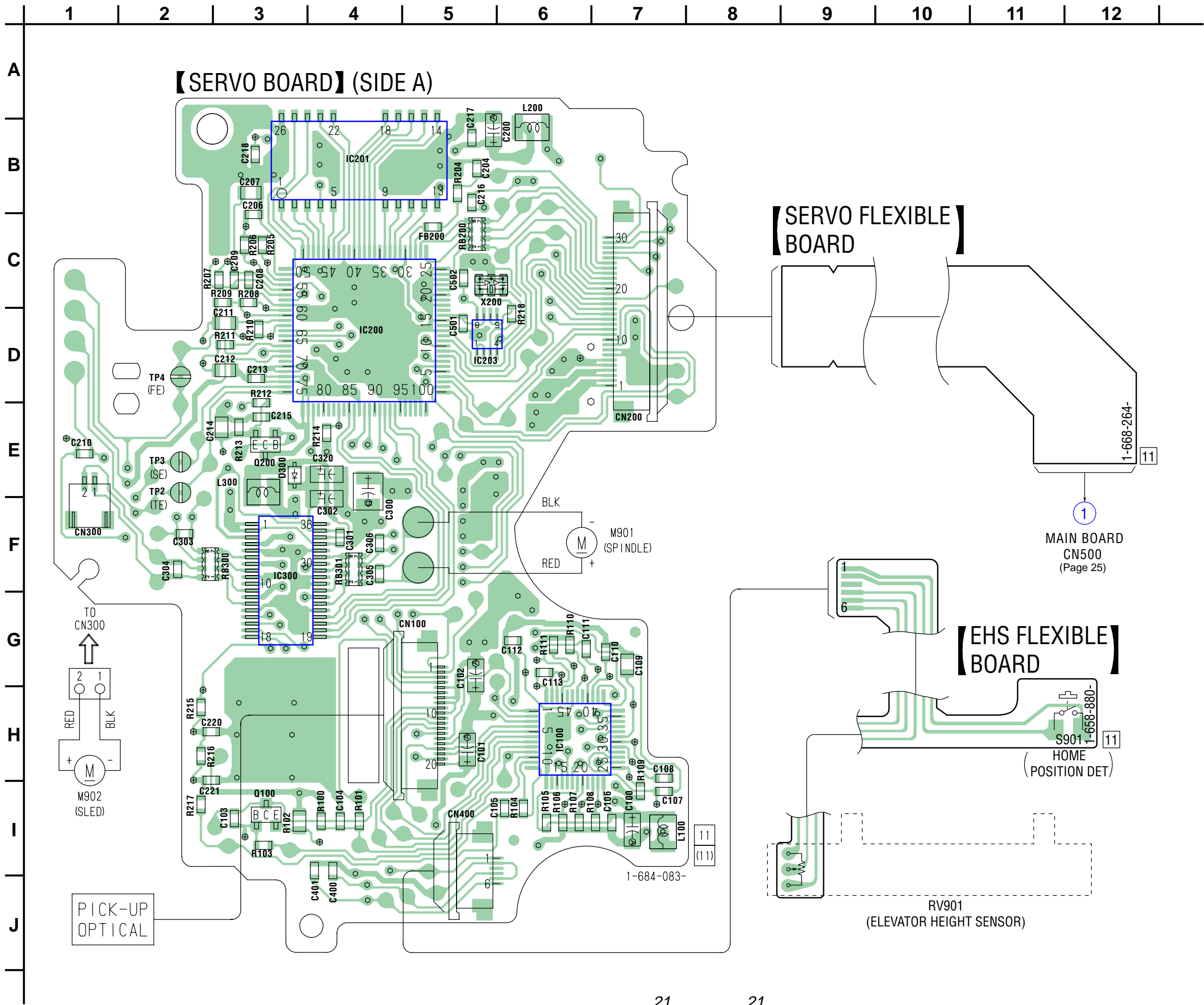
for printed wiring boards:

- ○ — : parts extracted from the component side.
- — : parts extracted from the conductor side.
- ○ : Through hole. (Servo and Power Sections)
- ● : Through hole. (Main Section)
- : Pattern from the side which enables seeing.
(The other layer's patterns are not indicated.)

Caution:
Pattern face side: Parts on the pattern face side seen from the (Side B) pattern face are indicated.
Parts face side: Parts on the parts face side seen from the (Side A) parts face are indicated.

4-4. PRINTED WIRING BOARD — SERVO SECTION — • Refer to page 19 for Circuit Boards Location.





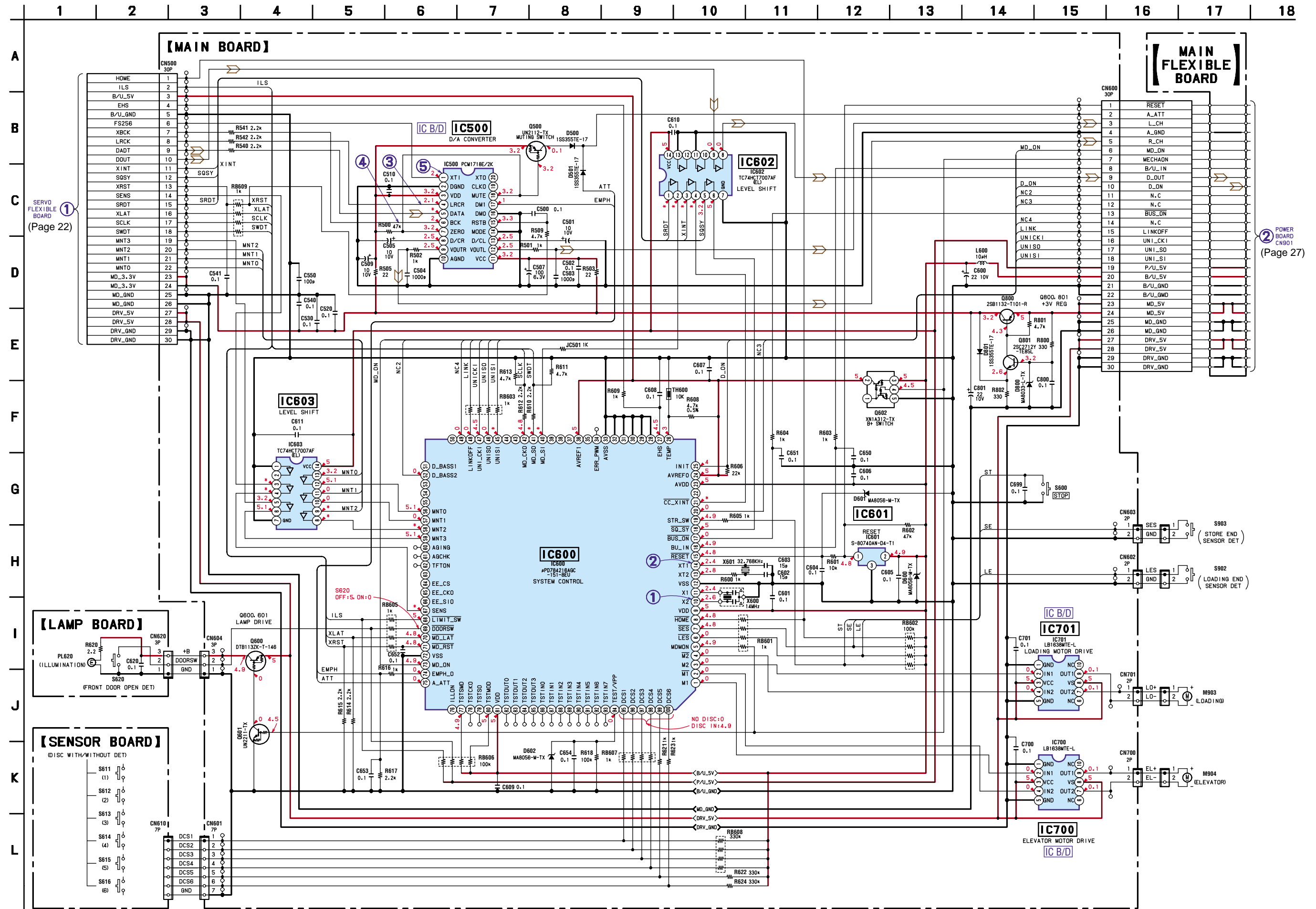
• Semiconductor Location

Ref. No.	Location
D300	E-3
IC100	H-6
IC200	D-4
IC201	B-4
IC203	D-5
IC300	F-3
Q100	I-3
Q200	E-3



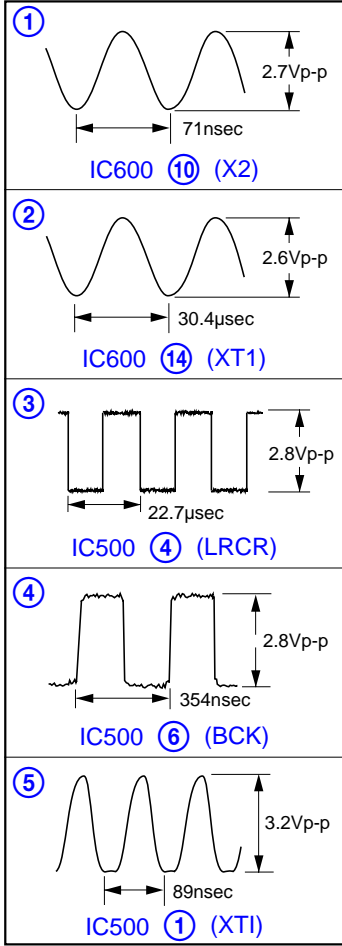
• Refer to page 24 for Waveforms.

4-6. SCHEMATIC DIAGRAM — MAIN SECTION — • Refer to page 28 for IC Block Diagrams.

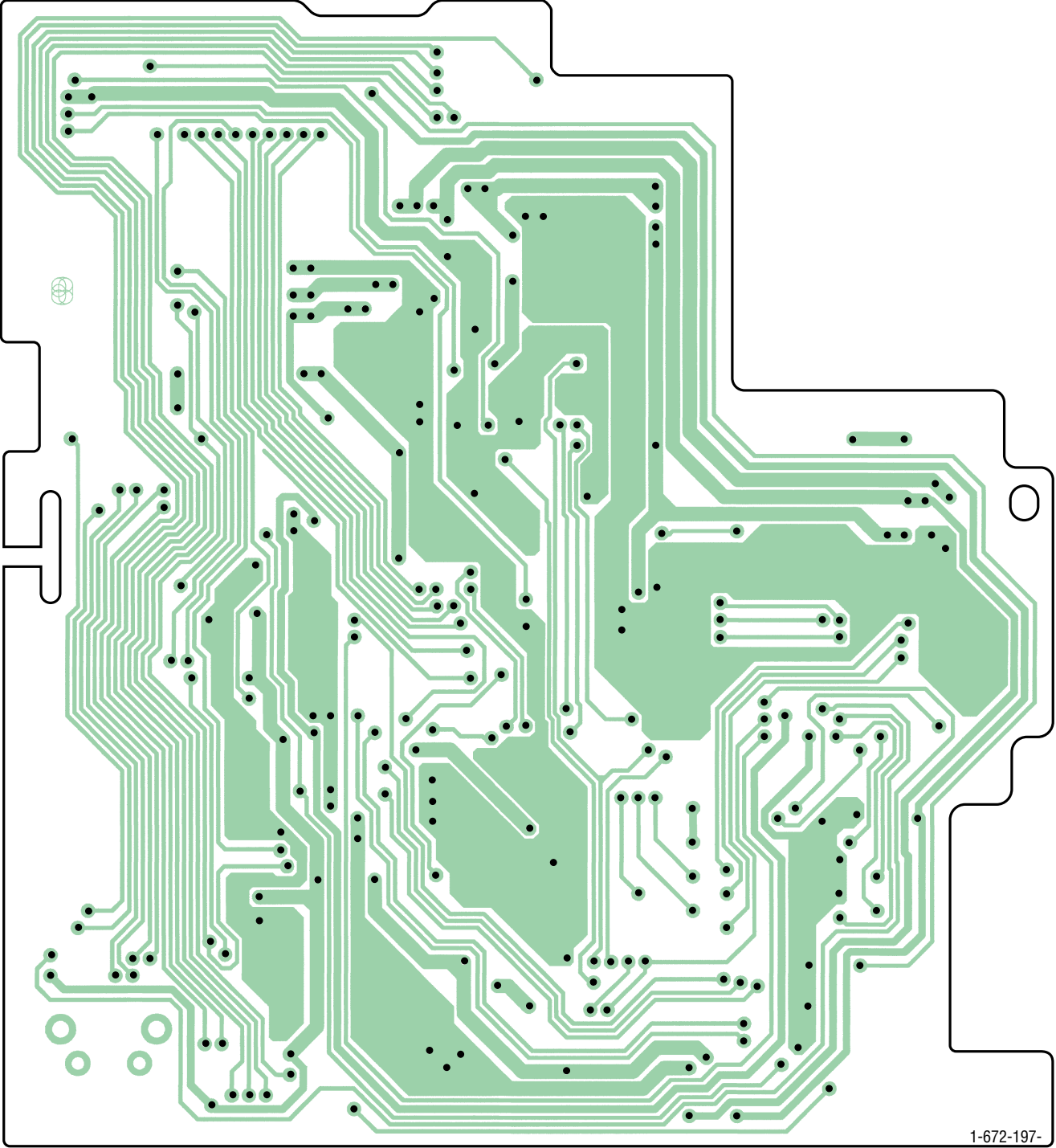


4-7. PRINTED WIRING BOARDS — MAIN SECTION — • Refer to page 19 for Circuit Boards Location.

• Waveforms
— Main Board —



【MAIN BOARD】(SIDE B)



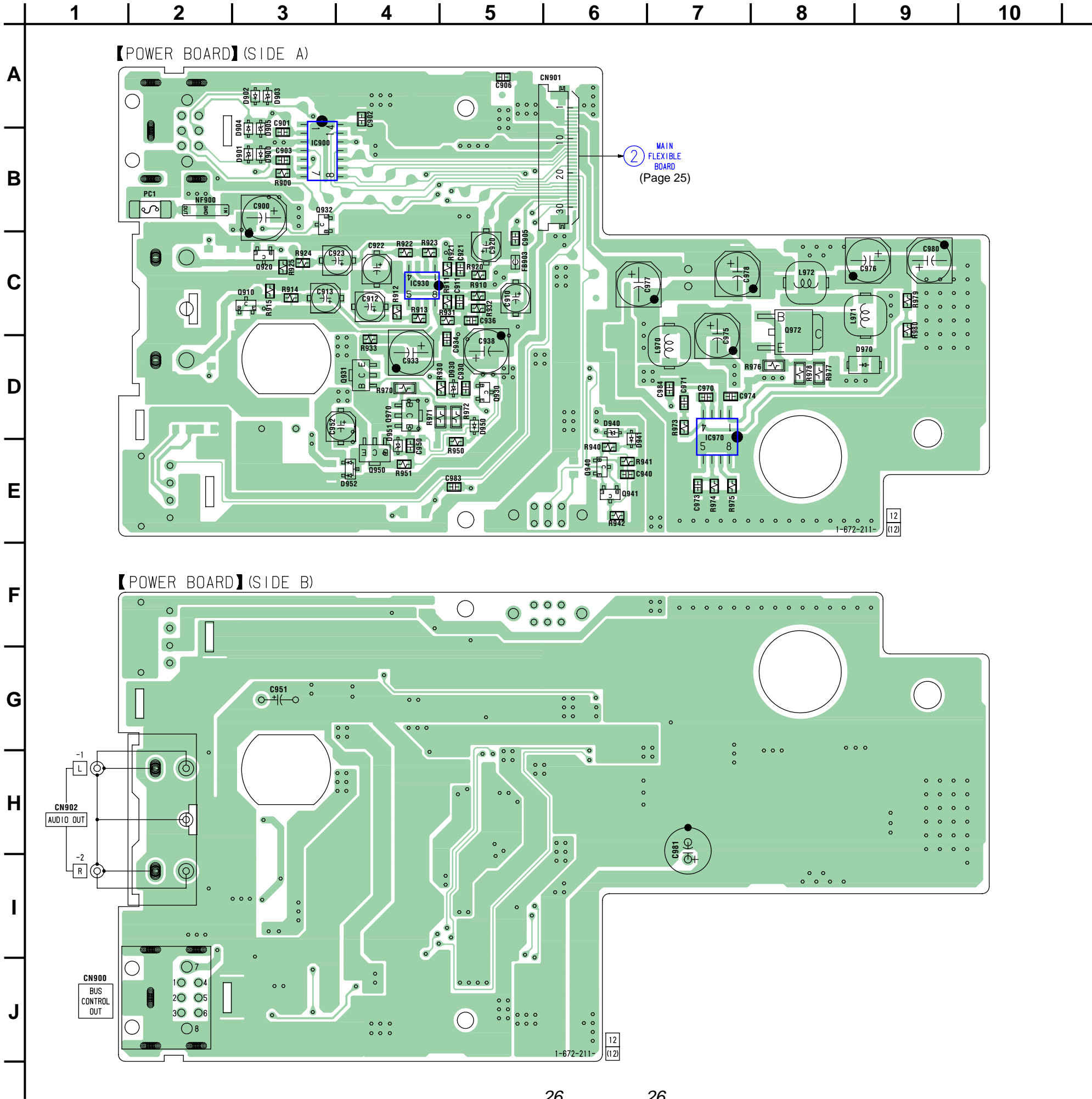
1-672-197-

12
12



Ref. No.	Location
D500	G-5
D501	G-5
D600	G-6
D601	F-6
D602	I-5
D800	D-4
D801	C-3
IC500	F-4
IC600	H-5
IC601	G-6
IC602	I-2
IC603	I-3
IC700	F-7
IC701	E-6
Q500	F-4
Q600	J-4
Q601	J-4
Q602	E-5
Q800	D-4
Q801	C-4

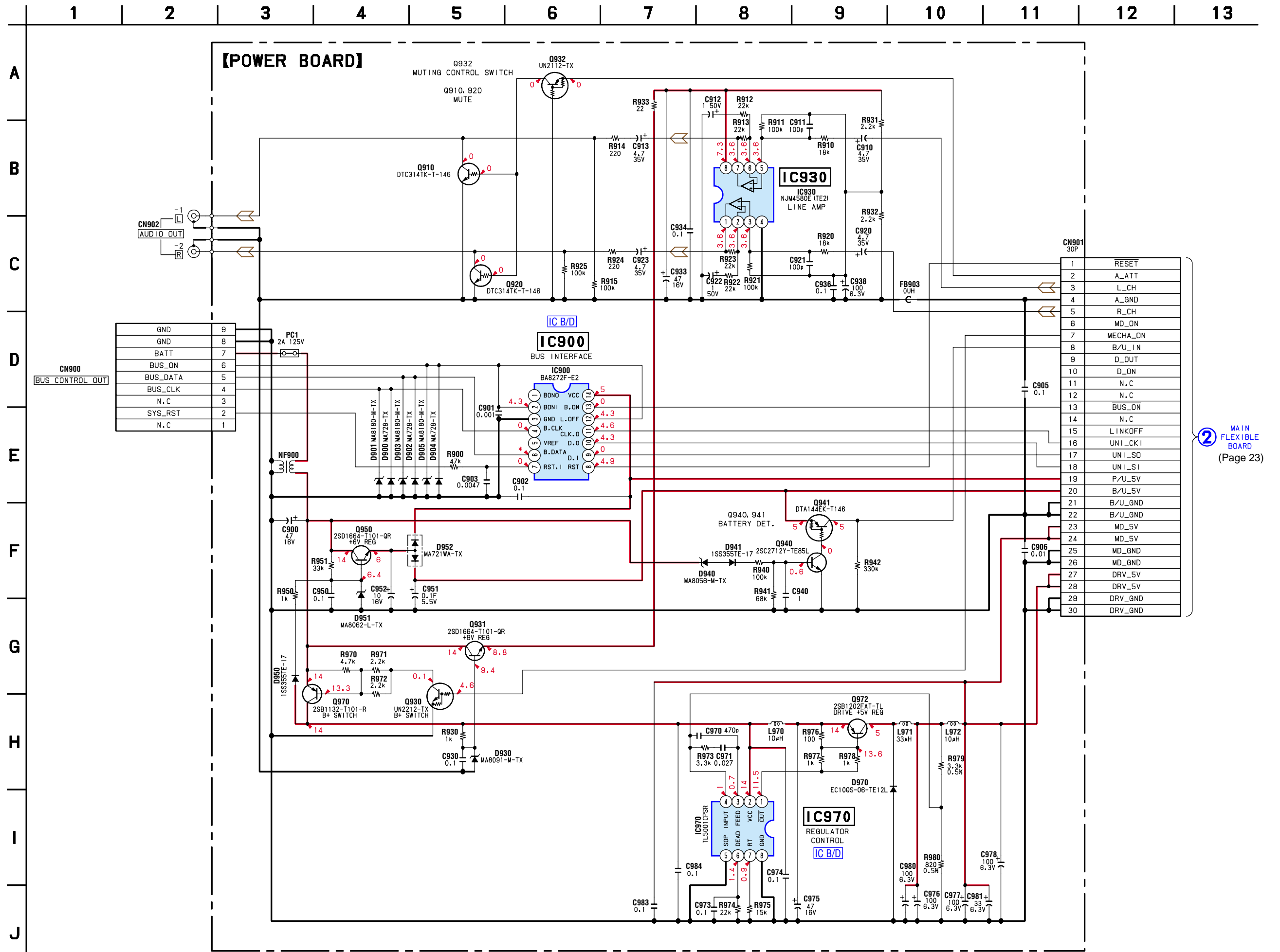
4-8. PRINTED WIRING BOARD — POWER SECTION — • Refer to page 19 for Circuit Boards Location.



• Semiconductor Location

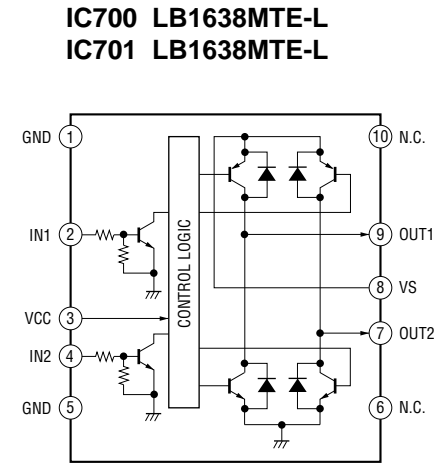
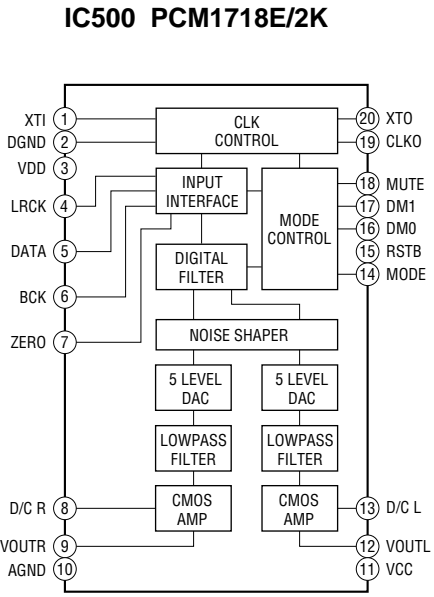
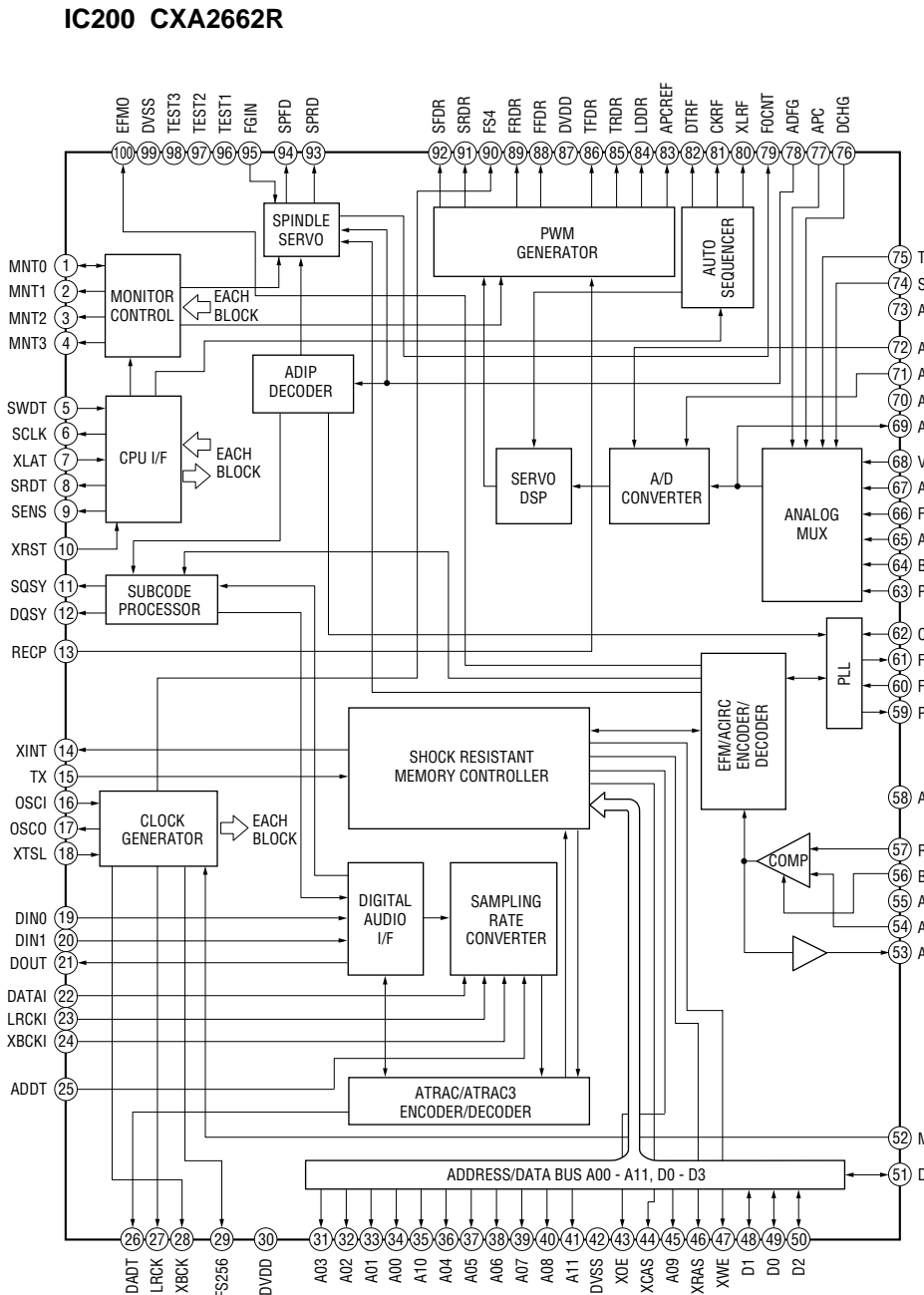
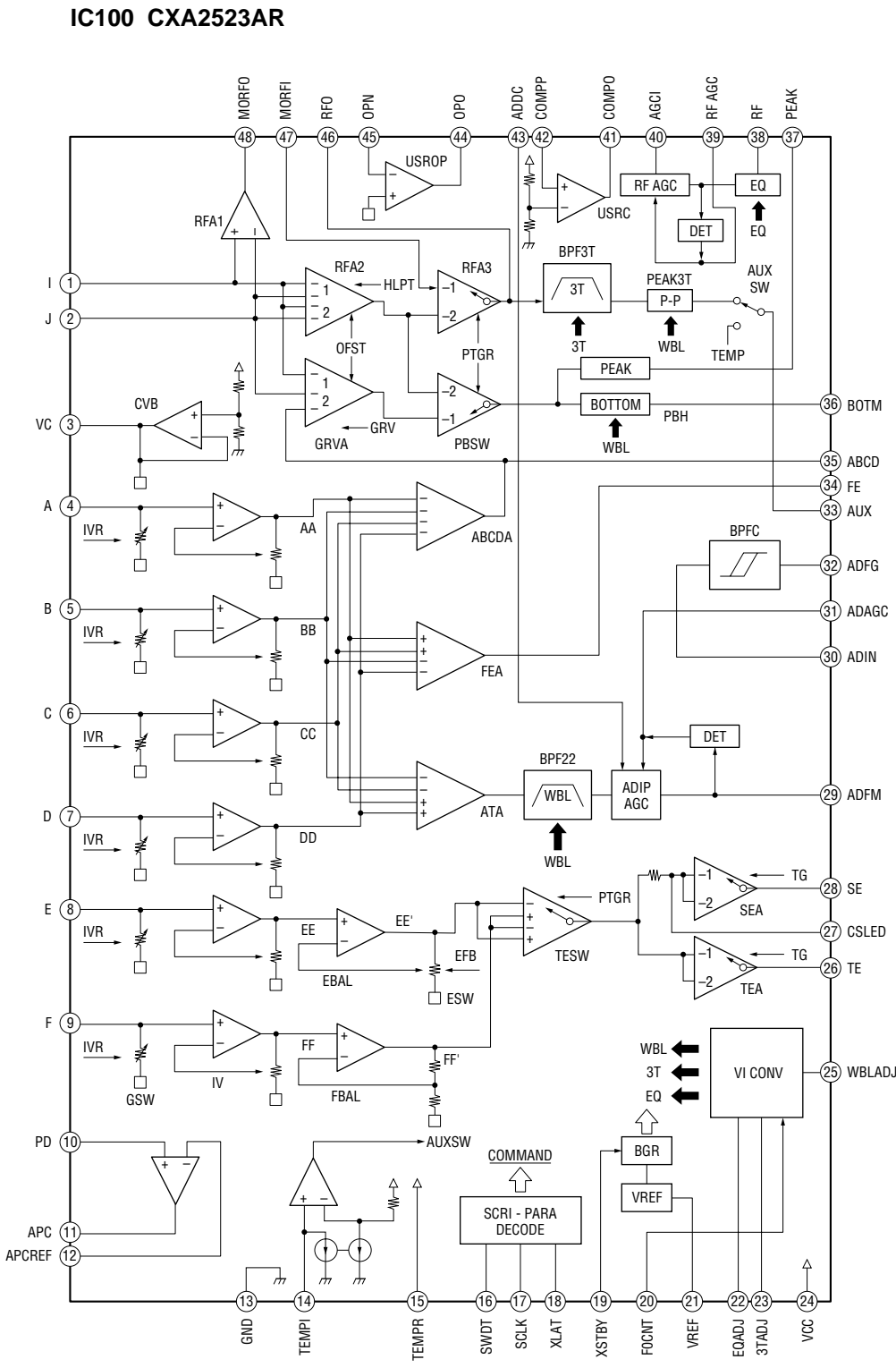
Ref. No.	Location
D900	B-3
D901	B-3
D902	A-3
D903	A-3
D904	B-3
D905	B-3
D930	D-5
D940	D-6
D941	E-6
D950	D-5
D951	D-4
D952	E-4
D970	D-9
IC900	B-3
IC930	C-4
IC970	E-7
Q910	C-3
Q920	C-3
Q930	D-5
Q931	D-4
Q932	B-3
Q940	E-6
Q941	E-6
Q950	E-4
Q970	D-4
Q972	C-8

4-9. SCHEMATIC DIAGRAM — POWER SECTION — • Refer to page 29 for IC Block Diagrams.

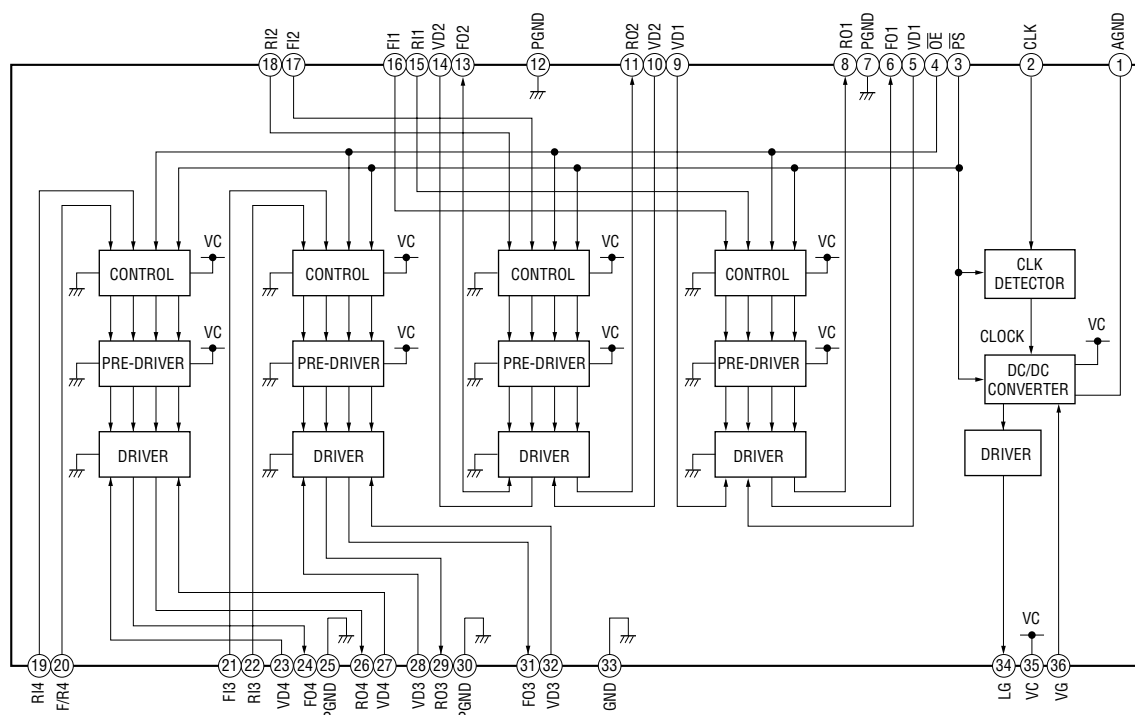


② MAIN FLEXIBLE BOARD (Page 23)

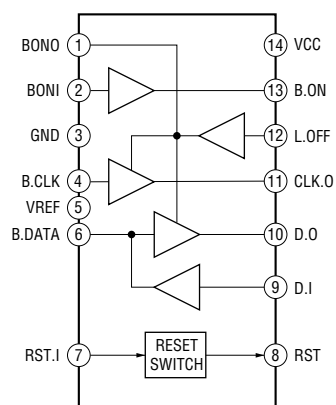
• IC BLOCK DIAGRAMS



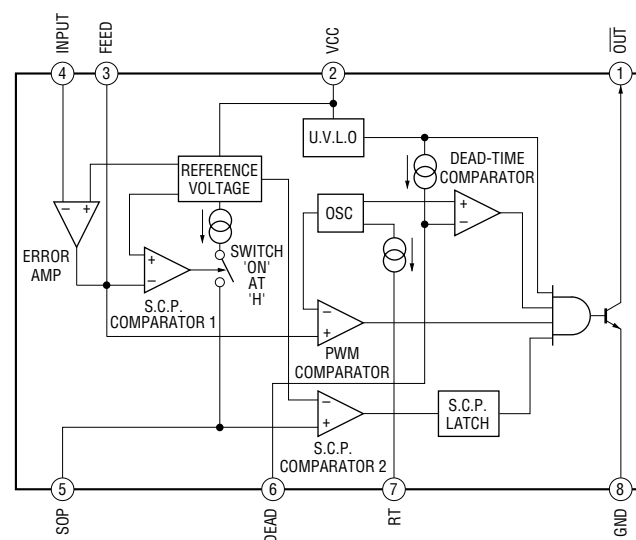
IC300 MPC17A36VMEL



IC900 BA8272F-E2



IC970 TL5001CPSR



SECTION 5 EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.

• Color Indication of Appearance Parts

Example :

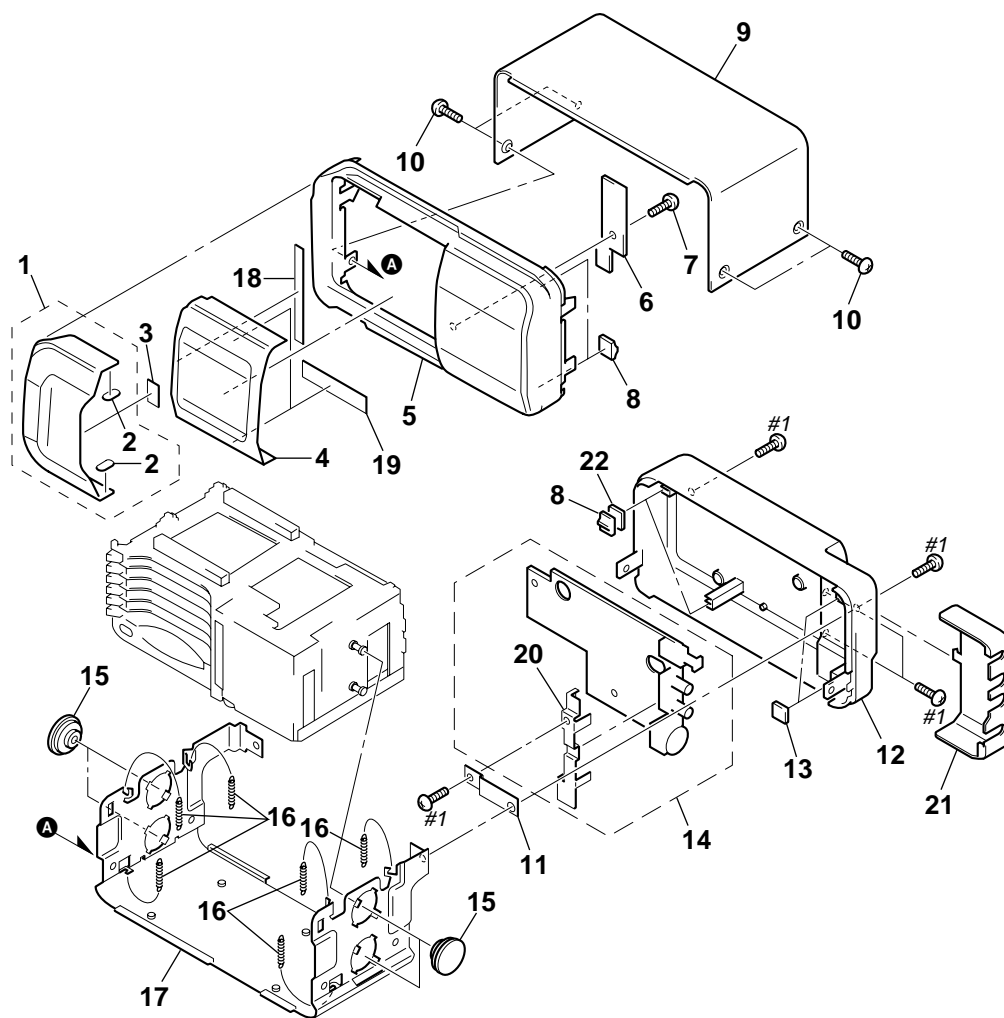
KNOB, BALANCE (WHITE) ... (RED)

↑
↑
 Parts Color Cabinet's Color

- Accessories are given in the last of this parts list.
- Abbreviation
CND: Canadian model

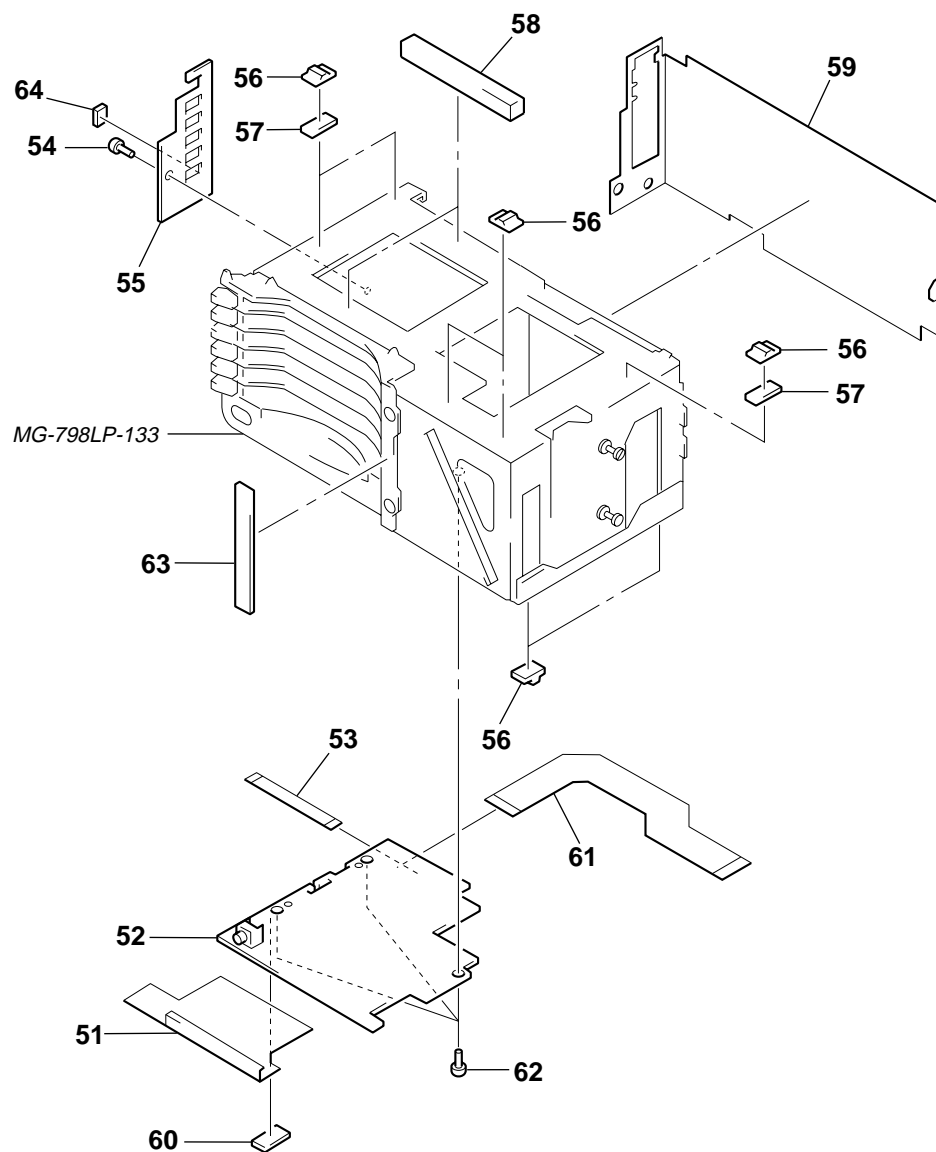
The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

5-1. CASE SECTION

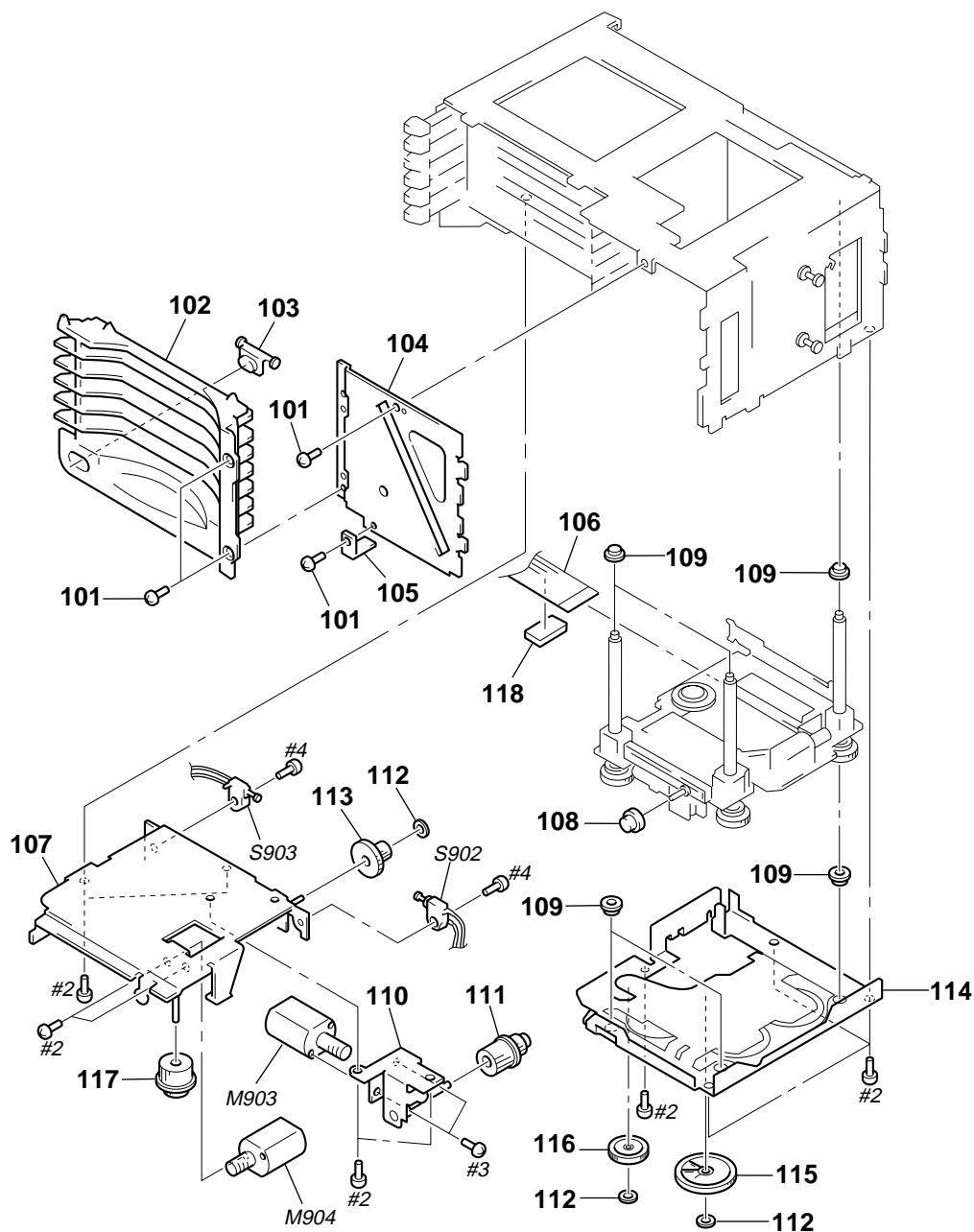
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-3381-687-1	DOOR (P) ASSY		13	3-931-697-01	CUSHION (STOPPER)	
2	3-930-744-01	SPACER (DOOR)		* 14	A-3294-938-A	POWER BOARD, COMPLETE	
3	3-831-441-11	CUSHION, RATTLE ABSORBER		15	3-930-176-01	DAMPER (798)	
4	X-3381-688-1	DOOR (S) ASSY		16	3-930-177-01	SPRING (FL), TENSION	
5	X-3381-685-1	PANEL (FRONT) ASSY		17	3-031-482-21	CASE (LOWER)	
* 6	1-672-198-12	LAMP BOARD		18	3-025-283-01	SHEET (DOOR S1)	
7	3-909-607-01	SCREW		19	3-242-774-01	SHEET (DOOR S2)	
8	3-348-750-01	CUSHION (DAMPER)		* 20	3-031-503-01	BRACKET	
9	3-031-481-21	CASE (UPPER)		21	3-031-483-21	COVER	
10	3-912-956-11	SCREW (2.6X6) (CU), +BVT		* 22	3-036-154-01	CUSHION (FP)	
* 11	3-031-489-01	PLATE, GROUND		#1	7-685-793-09	SCREW +PTT 2.6X8 (S)	
12	X-3381-686-1	PANEL (REAR) ASSY					

5-2. MAIN BOARD SECTION



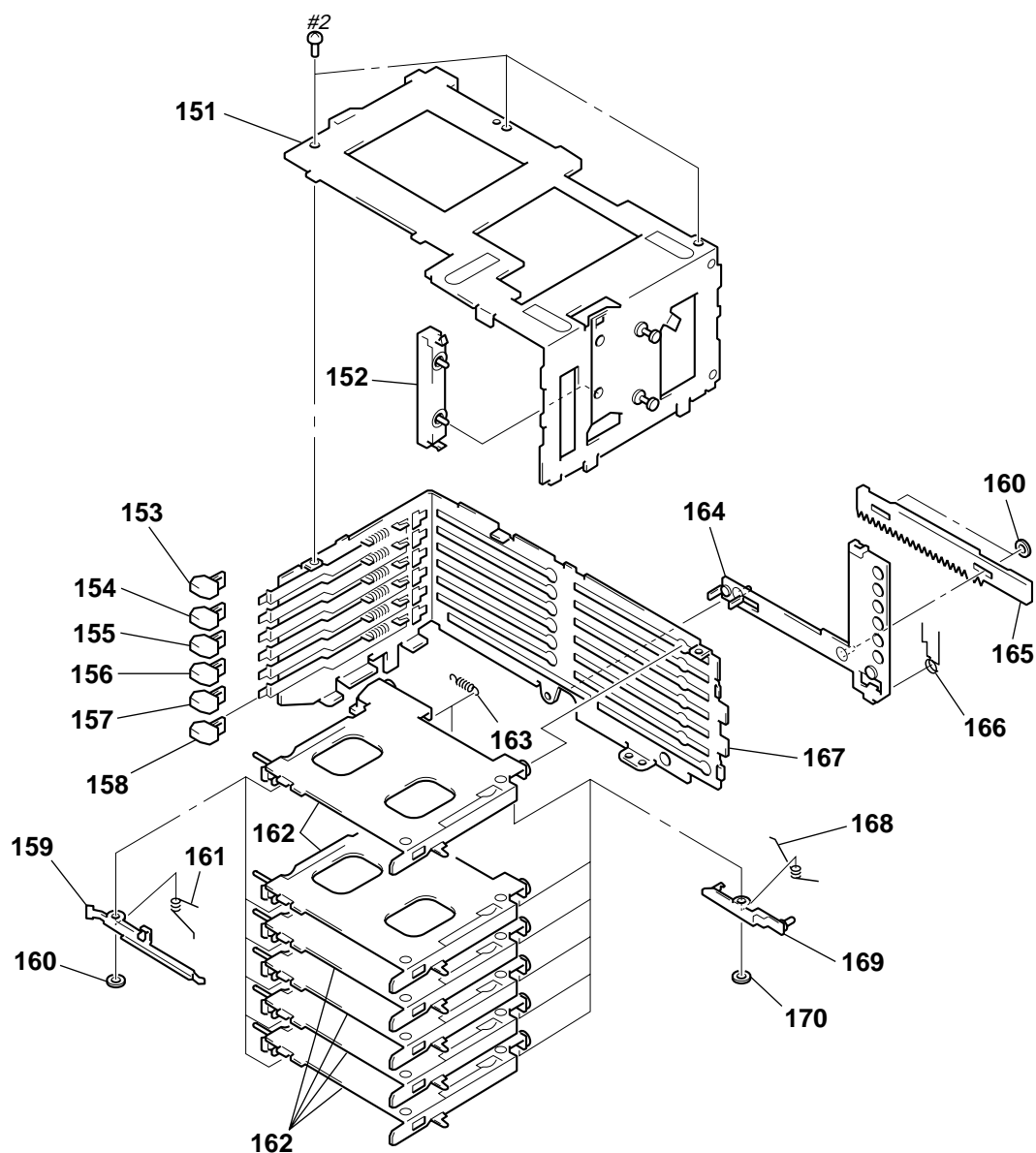
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 51	3-931-149-02	SHEET (MAIN PC BOARD)		58	3-931-699-01	CUSHION (ROLL H)	
52	A-3283-298-A	MAIN BOARD, COMPLETE		* 59	3-931-025-21	SHEET (MECHANICAL DECK)	
53	1-776-474-11	CABLE, FLAT 7P		* 60	3-021-073-01	CUSHION (MAIN)	
54	3-909-412-01	SCREW (+P) (1.7X2) (TYPE 3)		61	1-668-438-11	MAIN FLEXIBLE BOARD	
55	A-3340-373-A	SENSOR BOARD, COMPLETE		62	3-880-990-00	SCREW (1.7X3), FLAT, (+) SPECIAL	
56	3-348-750-01	CUSHION (DAMPER)		* 63	3-024-303-01	CUSHION (F)	
* 57	3-715-973-01	CUSHION		64	3-036-154-11	CUSHION (FP)	

5-3. MD SECTION (1) (MG-798LP-133)



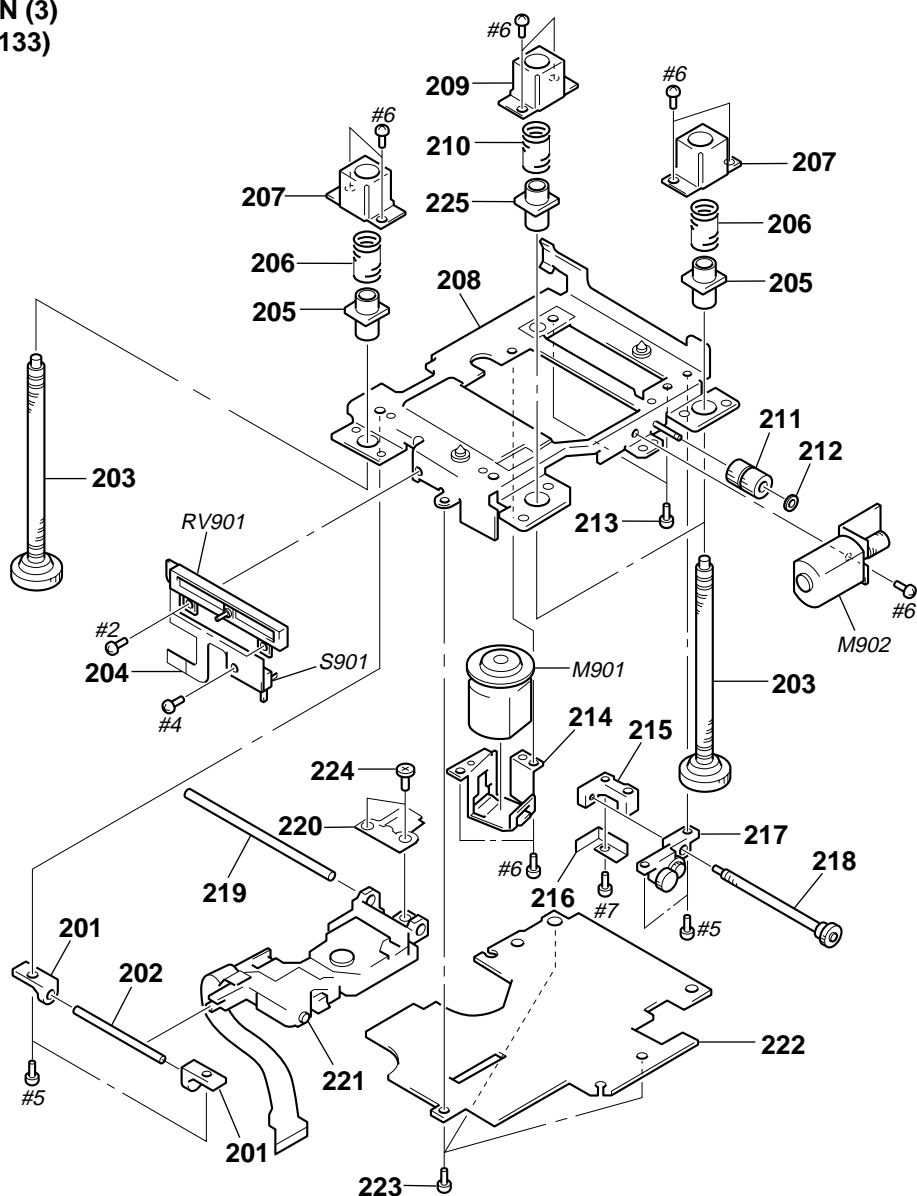
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	3-317-552-71	SCREW (M1.7)		* 114	X-3374-670-1	CHASSIS (BOTTOM) ASSY	
102	3-930-314-01	ESCUTCHEON		115	3-930-313-01	GEAR (ELVC)	
103	3-930-319-01	BUTTON (STOP)		116	3-020-386-01	GEAR (ELVA2)	
* 104	3-930-320-01	CHASSIS (FRONT)		117	3-020-363-01	WHEEL (ELV2), WORM	
105	3-931-366-01	STOPPER, LEAD		* 118	3-741-875-01	SHEET, RUBBER	
106	1-668-264-11	SERVO FLEXIBLE BOARD		M903	X-3371-508-2	MOTOR ASSY, LD (LOADING)	
* 107	X-3374-669-1	CHASSIS (MOTOR) ASSY		M904	X-3374-812-1	MOTOR ASSY, ELV (ELEVATOR)	
108	3-930-310-01	COLLAR (EHS)		S902	1-570-771-11	SWITCH (LOADING END SENSOR DET)	
109	3-930-312-02	BEARING (ELV)		S903	1-570-771-21	SWITCH (STORE END SENSOR DET)	
110	X-3374-673-1	BRACKET (LD2) ASSY		#2	7-627-852-37	SCREW, PRECISION +P 1.7X1.8 TYPE3	
111	3-930-365-01	WHEEL (LD), WORM		#3	7-627-554-07	SCREW, PRECISION +P 2X2.2	
112	3-377-719-11	WASHER, POLYETHYLENE		#4	7-627-855-07	SCREW, PRECISION +P 2X5.5 TYPE3	
113	3-930-317-01	GEAR (LD)					

5-4. MD SECTION (2) (MG-798LP-133)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 151	X-3371-209-3	CHASSIS (TOP) ASSY		162	X-3378-169-1	HOLDER (CADDIE) ASSY	
* 152	3-020-388-01	GUIDE (HOLDER 2)		163	3-930-352-01	SPRING (D LOCK), TENSION	
153	3-930-318-01	BUTTON (EJECT)		164	X-3375-509-1	SLIDER (3) ASSY, LOADING	
154	3-930-318-11	BUTTON (EJECT)		165	3-930-366-01	RACK (LOADING)	
155	3-930-318-21	BUTTON (EJECT)		166	3-930-360-01	SPRING (LIMITER), TORSION	
156	3-930-318-31	BUTTON (EJECT)		167	X-3374-671-1	CHASSIS (REAR 2) ASSY	
157	3-930-318-41	BUTTON (EJECT)		168	3-930-349-01	SPRING (LOCK), TORSION	
158	3-930-318-51	BUTTON (EJECT)		169	X-3378-251-1	PLATE (HOLDER) ASSY, LOCK	
159	3-040-662-02	LEVER, DISC EJECT		170	3-021-511-01	WASHER	
160	3-377-719-11	WASHER, POLYETHYLENE		#2	7-627-852-37	SCREW, PRECISION +P 1.7X1.8 TYPE3	
161	3-930-350-01	SPRING (EJ), TORSION					

5-5. MD SECTION (3) (MG-798LP-133)



The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	3-930-338-01	HOLDER (OP GUIDE B)		219	3-930-331-01	GUIDE (OPA)	
202	3-930-332-01	GUIDE (OPB)		220	3-020-346-01	SPRING (SL OUT 2), FEED	
203	X-3371-212-1	SCREW (ELV) ASSY, FEED		\triangle 221	X-3379-728-1	PICK-UP, OPTICAL KMS-241C/J1N	
204	1-658-880-11	EHS FLEXIBLE BOARD		222	A-3283-295-A	SERVO BOARD, COMPLETE	
205	3-020-351-01	SLEEVE (ELV2)		223	3-932-755-01	SCREW (M1.7X2.2)	
206	3-930-334-01	SPRING (ELV), COMPRESSION		224	3-703-816-32	SCREW (M1.4X1.6), SPECIAL HEAD	
207	3-930-345-01	PLATE (B), ELV LIMITER		225	3-930-333-01	SLEEVE (ELV)	
* 208	X-3371-215-1	CHASSIS (OP) ASSY		M901	A-3291-507-A	MOTOR BLOCK ASSY, SP (SPINDLE)	
209	3-930-344-01	PLATE (A), ELV LIMITER		M902	A-3291-508-A	MOTOR BLOCK ASSY, SL (SLED)	
210	3-930-711-01	SPRING (ELV2), COMPRESSION		RV901	1-223-817-11	RES, VAR, SLIDE 10K (ELEVATOR HEIGHT SENSOR)	
211	3-930-339-01	WHEEL (SL), WORM		S901	1-570-771-21	SWITCH (HOME POSITION DET)	
212	3-338-645-31	WASHER (0.8-2.5)		#2	7-627-852-37	SCREW, PRECISION +P 1.7X1.8 TYPE3	
213	3-930-343-01	SCREW (K1.7X3.5)		#4	7-627-855-07	SCREW, PRECISION +P 2X5.5 TYPE3	
214	3-930-342-01	RETAINER (SP)		#5	7-627-852-27	SCREW, PRECISION +P 1.7X3	
215	3-930-336-01	HOLDER (SLB)		#6	7-627-552-18	SCREW, PRECISION +P 1.7X1.6	
216	3-930-335-01	DETENT, SL		#7	7-627-852-58	SCREW, PRECISION +P 1.7X5 TYPE3	
217	X-3371-213-1	HOLDER (SLA) ASSY					
218	X-3371-214-1	SCREW (SL) ASSY, FEED					

SECTION 6 ELECTRICAL PARTS LIST

LAMP**MAIN****NOTE:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable
- Abbreviation
CND: Canadian model

- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u : μ , for example:
uA.. : μ A.. uPA.. : μ PA..
uPB.. : μ PB.. uPC.. : μ PC.. uPD.. : μ PD..
- CAPACITORS
uF : μ F
- COILS
uH : μ H

The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description	Remark				Ref. No.	Part No.	Description	Remark			
*	1-672-198-12	LAMP BOARD *****					C604	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
		< CAPACITOR >					C605	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C620	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C606	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		
		< CONNECTOR >					C607	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
* CN620	1-580-056-21	PIN, CONNECTOR (SMD) 3P					C608	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
		< PILOT LAMP >					C609	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
PL620	1-517-630-41	LAMP, PILOT (ILLUMINATION)					C610	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
		< RESISTOR >					C611	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
R620	1-216-298-00	METAL CHIP	2.2	5%	1/10W	C650	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		
		< SWITCH >					C651	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
S620	1-692-532-21	SWITCH, PUSH (1 KEY) (FRONT DOOR OPEN DET)					C652	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
							C653	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
							C654	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
							C699	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
							C700	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
							C701	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
							C800	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
							C801	1-104-852-11	TANTAL. CHIP	22uF	20%	10V	
							< CONNECTOR >						
*****							CN500	1-573-370-21	CONNECTOR, FFC/FPC 30P				
A-3283-298-A	MAIN BOARD, COMPLETE *****						* CN600	1-573-939-11	CONNECTOR, FFC/FPC (ZIF) 30P				
							CN601	1-573-916-11	CONNECTOR, FFC/FPC (ZIF) 7P				
3-034-614-02	PAPER, SHIELD						* CN602	1-580-055-21	PIN, CONNECTOR (SMD) 2P				
							* CN603	1-580-055-21	PIN, CONNECTOR (SMD) 2P				
		< CAPACITOR >					* CN604	1-580-056-21	PIN, CONNECTOR (SMD) 3P				
C500	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	CN700	1-580-055-21	PIN, CONNECTOR (SMD) 2P					
C501	1-104-851-11	TANTAL. CHIP	10uF	20%	10V	* CN701	1-580-055-21	PIN, CONNECTOR (SMD) 2P					
C502	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	< DIODE >							
C503	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	D500	8-719-988-61	DIODE 1SS355TE-17					
C504	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	D501	8-719-988-61	DIODE 1SS355TE-17					
C505	1-104-851-11	TANTAL. CHIP	10uF	20%	10V	D600	8-719-977-03	DIODE DTZ5.6B					
C507	1-110-450-11	ELECT CHIP	100uF	20%	6.3V	D601	8-719-977-03	DIODE DTZ5.6B					
C509	1-104-851-11	TANTAL. CHIP	10uF	20%	10V	D602	8-719-977-03	DIODE DTZ5.6B					
C510	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	D800	8-719-421-18	DIODE MA8033-L-TX					
C520	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	D801	8-719-988-61	DIODE 1SS355TE-17					
C530	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	< IC >							
C540	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	IC500	8-759-571-84	IC PCM1718E/2K					
C541	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	IC600	6-801-399-01	IC uPD784216AGC-151-8EU					
C550	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	IC601	8-759-503-60	IC S-80740AN-D4-S					
C600	1-104-852-11	TANTAL. CHIP	22uF	20%	10V	IC602	8-759-238-47	IC TC74HCT7007AF(EL)					
C601	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	IC603	8-759-238-47	IC TC74HCT7007AF(EL)					
C602	1-162-917-11	CERAMIC CHIP	15PF	5%	50V								
C603	1-162-917-11	CERAMIC CHIP	15PF	5%	50V								

MDX-66XLP

MAIN

POWER

Ref. No.	Part No.	Description	Remark		
IC700	8-759-823-87	IC LB1638M			
IC701	8-759-823-87	IC LB1638M			
< RESISTOR >					
JC501	1-216-821-11	METAL CHIP	1K	5%	1/16W
< COIL >					
L600	1-412-058-11	INDUCTOR CHIP	10uH		
< TRANSISTOR >					
Q500	8-729-424-12	TRANSISTOR	UN2112		
Q600	8-729-904-60	TRANSISTOR	DTB113ZK		
Q601	8-729-421-22	TRANSISTOR	UN2211		
Q602	8-729-020-67	TRANSISTOR	XN1A312-TX		
Q800	8-729-106-60	TRANSISTOR	2SB1115A		
Q801	8-729-200-13	TRANSISTOR	2SC2712-Y		
< RESISTOR >					
R500	1-216-841-11	METAL CHIP	47K	5%	1/16W
R501	1-216-821-11	METAL CHIP	1K	5%	1/16W
R502	1-216-821-11	METAL CHIP	1K	5%	1/16W
R503	1-216-801-11	METAL CHIP	22	5%	1/16W
R505	1-216-801-11	METAL CHIP	22	5%	1/16W
R509	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R540	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R541	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R542	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R600	1-216-821-11	METAL CHIP	1K	5%	1/16W
R601	1-216-833-11	METAL CHIP	10K	5%	1/16W
R602	1-216-841-11	METAL CHIP	47K	5%	1/16W
R603	1-216-821-11	METAL CHIP	1K	5%	1/16W
R604	1-216-821-11	METAL CHIP	1K	5%	1/16W
R605	1-216-821-11	METAL CHIP	1K	5%	1/16W
R606	1-216-837-11	METAL CHIP	22K	5%	1/16W
R608	1-218-708-11	METAL CHIP	4.7K	0.5%	1/16W
R609	1-216-821-11	METAL CHIP	1K	5%	1/16W
R610	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R611	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R612	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R613	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R614	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R615	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R616	1-216-821-11	METAL CHIP	1K	5%	1/16W
R617	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R618	1-216-845-11	METAL CHIP	100K	5%	1/16W
R621	1-216-821-11	METAL CHIP	1K	5%	1/16W
R622	1-216-851-11	METAL CHIP	330K	5%	1/16W
R623	1-216-821-11	METAL CHIP	1K	5%	1/16W
R624	1-216-851-11	METAL CHIP	330K	5%	1/16W
R800	1-216-815-11	METAL CHIP	330	5%	1/16W
R801	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R802	1-216-815-11	METAL CHIP	330	5%	1/16W

Ref. No.	Part No.	Description	Remark		
< NETWORK RESISTOR >					
RB601	1-233-412-11	RES, CHIP NETWORK 1.0KX4 (3216)			
RB602	1-233-810-21	RES, CHIP NETWORK 100KX4 (3216)			
RB603	1-233-412-11	RES, CHIP NETWORK 1.0KX4 (3216)			
RB605	1-233-412-11	RES, CHIP NETWORK 1.0KX4 (3216)			
RB606	1-233-810-21	RES, CHIP NETWORK 100KX4 (3216)			
RB607	1-233-412-11	RES, CHIP NETWORK 1.0KX4 (3216)			
RB608	1-239-446-11	RES, CHIP NETWORK 330KX4			
RB609	1-233-412-11	RES, CHIP NETWORK 1.0KX4 (3216)			
< SWITCH >					
S600	1-571-914-21	SWITCH, KEYBOARD (STOP)			
< THERMISTOR >					
TH600	1-804-497-21	THERMISTOR, CHIP			
< VIBRATOR >					
X600	1-760-607-11	VIBRATOR, CERAMIC (14MHz)			
X601	1-579-886-21	VIBRATOR, CRYSTAL (32.768kHz)			

*	A-3294-938-A	POWER BOARD, COMPLETE	*****		
*	3-031-503-01	BRACKET			
< CAPACITOR >					
C900	1-126-204-11	ELECT CHIP	47uF	20%	16V
C901	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C902	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C903	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C905	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C906	1-163-021-00	CERAMIC CHIP	0.01uF	10%	50V
C910	1-126-603-11	ELECT CHIP	4.7uF	20%	35V
C911	1-164-162-11	CERAMIC CHIP	100PF	2%	50V
C912	1-126-193-11	ELECT	1uF	20%	50V
C913	1-126-603-11	ELECT CHIP	4.7uF	20%	35V
C920	1-126-603-11	ELECT CHIP	4.7uF	20%	35V
C921	1-164-162-11	CERAMIC CHIP	100PF	2%	50V
C922	1-126-193-11	ELECT	1uF	20%	50V
C923	1-126-603-11	ELECT CHIP	4.7uF	20%	35V
C930	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C933	1-126-204-11	ELECT CHIP	47uF	20%	16V
C934	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C936	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C938	1-128-590-11	ELECT CHIP	100uF	20%	6.3V
C940	1-164-346-11	CERAMIC CHIP	1uF		16V
C950	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C951	1-125-710-11	DOUBLE LAYERS	0.1F		5.5V
C952	1-124-779-00	ELECT CHIP	10uF	20%	16V
C970	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C971	1-163-986-00	CERAMIC CHIP	0.027uF	10%	25V

POWER

SENSOR

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C973	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V	< TRANSISTOR >			
C974	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V	Q910	8-729-920-21	TRANSISTOR	DTC314TK-T-146
C975	1-126-204-11	ELECT CHIP	47uF 20% 16V	Q920	8-729-920-21	TRANSISTOR	DTC314TK-T-146
C976	1-128-590-11	ELECT CHIP	100uF 20% 6.3V	Q930	8-729-424-59	TRANSISTOR	UN2212
C977	1-128-590-11	ELECT CHIP	100uF 20% 6.3V	Q931	8-729-920-85	TRANSISTOR	2SD1664-QR
C978	1-128-590-11	ELECT CHIP	100uF 20% 6.3V	Q932	8-729-424-12	TRANSISTOR	UN2112
C980	1-128-590-11	ELECT CHIP	100uF 20% 6.3V	Q940	8-729-200-13	TRANSISTOR	2SC2712-Y
C981	1-127-485-00	ELECT	33uF 20% 6.3V	Q941	8-729-027-38	TRANSISTOR	DTA144EK-T146
C983	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V	Q950	8-729-920-85	TRANSISTOR	2SD1664-QR
C984	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V	Q970	8-729-106-60	TRANSISTOR	2SB1115A
< CONNECTOR >				Q972	8-729-822-84	TRANSISTOR	2SB1202FAST
CN900	1-580-907-12	PLUG, CONNECTOR 9P (BUS CONTROL OUT)		< RESISTOR >			
* CN901	1-573-939-11	CONNECTOR, FFC/FPC (ZIF) 30P		R900	1-216-089-11	RES-CHIP	47K 5% 1/10W
< JACK >				R910	1-216-079-00	METAL CHIP	18K 5% 1/10W
CN902	1-580-441-11	JACK, PIN 2P (AUDIO OUT)		R911	1-216-097-11	RES-CHIP	100K 5% 1/10W
< DIODE >				R912	1-216-081-00	METAL CHIP	22K 5% 1/10W
D900	8-719-421-27	DIODE MA728		R913	1-216-081-00	METAL CHIP	22K 5% 1/10W
D901	8-719-057-80	DIODE MA8180-M-TX		R914	1-216-033-00	METAL CHIP	220 5% 1/10W
D902	8-719-421-27	DIODE MA728		R915	1-216-097-11	RES-CHIP	100K 5% 1/10W
D903	8-719-057-80	DIODE MA8180-M-TX		R920	1-216-079-00	METAL CHIP	18K 5% 1/10W
D904	8-719-421-27	DIODE MA728		R921	1-216-097-11	RES-CHIP	100K 5% 1/10W
D905	8-719-057-80	DIODE MA8180-M-TX		R922	1-216-081-00	METAL CHIP	22K 5% 1/10W
D930	8-719-422-97	DIODE MA8091-M		R923	1-216-081-00	METAL CHIP	22K 5% 1/10W
D940	8-719-977-03	DIODE DTZ5.6B		R924	1-216-033-00	METAL CHIP	220 5% 1/10W
D941	8-719-988-61	DIODE 1SS355TE-17		R925	1-216-097-11	RES-CHIP	100K 5% 1/10W
D950	8-719-988-61	DIODE 1SS355TE-17		R930	1-216-049-11	RES-CHIP	1K 5% 1/10W
D951	8-719-422-62	DIODE MA8062-L-TX		R931	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
D952	8-719-041-79	DIODE MA721WA-TX		R932	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
D970	8-719-210-43	DIODE EC10QS-06		R933	1-216-009-11	RES-CHIP	22 5% 1/10W
< FERRITE BEAD >				R940	1-216-097-11	RES-CHIP	100K 5% 1/10W
FB903	1-414-235-22	INDUCTOR, FERRITE BEAD		R941	1-216-093-11	RES-CHIP	68K 5% 1/10W
< IC >				R942	1-216-109-00	METAL CHIP	330K 5% 1/10W
IC900	8-759-444-86	IC BA8272F-E2		R950	1-216-049-11	RES-CHIP	1K 5% 1/10W
IC930	8-759-385-17	IC NJM4580E(Te2)		R951	1-216-085-11	RES-CHIP	33K 5% 1/10W
IC970	8-759-983-96	IC TL5001CPS		R970	1-216-214-00	RES-CHIP	4.7K 5% 1/8W
< COIL >				R971	1-216-206-00	RES-CHIP	2.2K 5% 1/8W
L970	1-409-640-21	COIL, CHIP CHOKE 10uH		R972	1-216-206-00	RES-CHIP	2.2K 5% 1/8W
L971	1-403-584-11	COIL, CHIP CHOKE 33uH		R973	1-216-061-11	RES-CHIP	3.3K 5% 1/10W
L972	1-409-640-21	COIL, CHIP CHOKE 10uH		R974	1-216-081-00	METAL CHIP	22K 5% 1/10W
< FILTER >				R975	1-216-077-11	RES-CHIP	15K 5% 1/10W
NF900	1-239-466-21	FILTER, EMI		R976	1-216-174-00	RES-CHIP	100 5% 1/8W
< FUSE >				R977	1-216-198-00	RES-CHIP	1K 5% 1/8W
PC1	1-533-351-11	FUSE, CHIP (2A/125V)		R978	1-216-198-00	RES-CHIP	1K 5% 1/8W
				R979	1-216-663-11	METAL CHIP	3.3K 0.5% 1/10W
				R980	1-216-649-11	METAL CHIP	820 0.5% 1/10W

				A-3340-373-A SENSOR BOARD, COMPLETE (When replacing			
				any parts in the SENSOR board, the whole			
				mounted board should be replaced.)			

MDX-66XLP

SERVO

Ref. No.	Part No.	Description	Remark			
	A-3283-295-A	SERVO BOARD, COMPLETE	*****			
		< CAPACITOR >				
C100	1-107-685-11	TANTAL. CHIP	15uF	20%	6.3V	
C101	1-135-201-11	TANTALUM CHIP	10uF	20%	4V	
C102	1-135-201-11	TANTALUM CHIP	10uF	20%	4V	
C103	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	
C104	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V	
C105	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V	
C106	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C107	1-110-563-11	CERAMIC CHIP	0.068uF	10%	16V	
C108	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	
C109	1-109-982-11	CERAMIC CHIP	1uF	10%	10V	
C110	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
C111	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V	
C112	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C113	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C200	1-107-685-11	TANTAL. CHIP	15uF	20%	6.3V	
C204	1-164-217-11	CERAMIC CHIP	150PF	5%	50V	
C206	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C207	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V	
C208	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C209	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	
C210	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	
C211	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V	
C212	1-163-023-00	CERAMIC CHIP	0.015uF	5%	50V	
C213	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C214	1-109-982-11	CERAMIC CHIP	1uF	10%	10V	
C215	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C216	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C217	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C218	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	
C220	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C221	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C300	1-104-852-11	TANTAL. CHIP	22uF	20%	10V	
C301	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C302	1-113-984-11	TANTAL. CHIP	1.5uF	20%	35V	
C303	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C304	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C305	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C306	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C320	1-113-984-11	TANTAL. CHIP	1.5uF	20%	35V	
C400	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C401	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C501	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	
C502	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
		< CONNECTOR >				
CN100	1-573-929-21	CONNECTOR, FFC/FPC (ZIF) 20P				
CN200	1-573-370-21	CONNECTOR, FFC/FPC 30P				
* CN300	1-770-619-11	PIN, CONNECTOR 2P				
CN400	1-573-346-21	CONNECTOR, FFC/FPC 6P				

Ref. No.	Part No.	Description	Remark			
		< DIODE >				
D300	8-719-988-61	DIODE 1SS355TE-17				
		< FERRITE BEAD >				
FB200	1-414-594-11	INDUCTOR, FERRITE BEAD				
		< IC >				
IC100	8-752-080-95	IC CXA2523AR				
IC200	8-752-404-64	IC CXD2662R				
IC201	8-759-671-27	IC MSM51V4400E-70TS-K				
IC203	8-759-096-87	IC TC7WU04FU(TE12R)				
IC300	8-759-682-72	IC SC111236VMEL				
		< COIL >				
L100	1-412-058-11	INDUCTOR CHIP 10uH				
L200	1-412-058-11	INDUCTOR CHIP 10uH				
L300	1-412-034-11	INDUCTOR CHIP 330uH				
		< TRANSISTOR >				
Q100	8-729-216-22	TRANSISTOR 2SA1162-G				
Q200	8-729-200-13	TRANSISTOR 2SC2712-Y				
		< RESISTOR >				
R100	1-216-853-11	METAL CHIP 470K	5%	1/16W		
R101	1-218-709-11	METAL CHIP 5.1K	0.5%	1/16W		
R102	1-216-308-00	METAL CHIP 4.7	5%	1/10W		
R103	1-216-811-11	METAL CHIP 150	5%	1/16W		
R104	1-216-853-11	METAL CHIP 470K	5%	1/16W		
R105	1-218-739-11	RES-CHIP 91K	5%	1/10W		
R106	1-216-994-11	RES-CHIP 13K	5%	1/10W		
R107	1-216-994-11	RES-CHIP 13K	5%	1/10W		
R108	1-216-994-11	RES-CHIP 13K	5%	1/10W		
R109	1-216-842-11	METAL CHIP 56K	5%	1/16W		
R110	1-216-833-11	METAL CHIP 10K	5%	1/16W		
R111	1-216-833-11	METAL CHIP 10K	5%	1/16W		
R204	1-216-809-11	METAL CHIP 100	5%	1/16W		
R205	1-216-833-11	METAL CHIP 10K	5%	1/16W		
R206	1-216-845-11	METAL CHIP 100K	5%	1/16W		
R207	1-216-855-11	METAL CHIP 680K	5%	1/16W		
R208	1-216-827-11	METAL CHIP 3.3K	5%	1/16W		
R209	1-216-821-11	METAL CHIP 1K	5%	1/16W		
R210	1-216-821-11	METAL CHIP 1K	5%	1/16W		
R211	1-216-811-11	METAL CHIP 150	5%	1/16W		
R212	1-216-819-11	METAL CHIP 680	5%	1/16W		
R213	1-216-853-11	METAL CHIP 470K	5%	1/16W		
R214	1-216-809-11	METAL CHIP 100	5%	1/16W		
R215	1-216-825-11	METAL CHIP 2.2K	5%	1/16W		
R216	1-216-825-11	METAL CHIP 2.2K	5%	1/16W		
R217	1-216-825-11	METAL CHIP 2.2K	5%	1/16W		
R218	1-216-833-11	METAL CHIP 10K	5%	1/16W		

Ref. No.	Part No.	Description	Remark
< NETWORK RESISTOR >			
RB200	1-233-576-11	RES, CHIP NETWORK 100X4	
RB300	1-233-600-11	RES, CHIP NETWORK 2.2X4 (3216)	
RB301	1-233-600-11	RES, CHIP NETWORK 2.2X4 (3216)	
< SWITCH >			
S400	1-692-532-21	SWITCH, PUSH (1 KEY) (LIMIT)	
< VIBRATOR >			
X200	1-795-144-21	VIBRATOR, CERAMIC (45MHZ)	

MISCELLANEOUS			

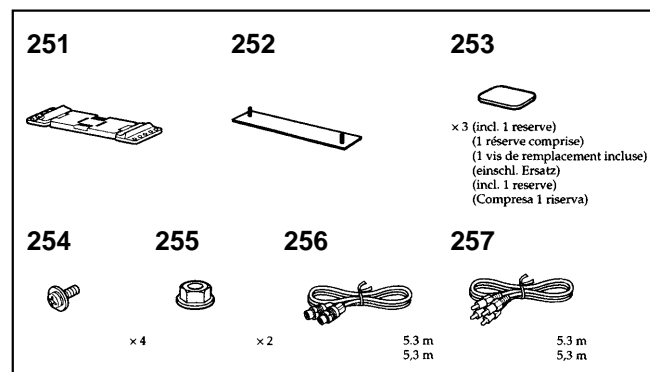
53	1-776-474-11	CABLE, FLAT 7P	
61	1-668-438-11	MAIN FLEXIBLE BOARD	
106	1-668-264-11	SERVO FLEXIBLE BOARD	
204	1-658-880-11	EHS FLEXIBLE BOARD	
△ 221	X-3379-728-1	PICK-UP, OPTICAL KMS-241C/J1N	
M901	A-3291-507-A	MOTOR BLOCK ASSY, SP (SPINDLE)	
M902	A-3291-508-A	MOTOR BLOCK ASSY, SL (SLED)	
M903	X-3371-508-2	MOTOR ASSY, LD (LOADING)	
M904	X-3374-812-1	MOTOR ASSY, ELV (ELEVATOR)	
RV901	1-223-817-11	RES, VAR, SLIDE 10K (ELEVATOR HEIGHT SENSOR)	
S901	1-570-771-21	SWITCH (HOME POSITION DET)	
S902	1-570-771-11	SWITCH (LOADING END SENSOR DET)	
S903	1-570-771-21	SWITCH (STORE END SENSOR DET)	

ACCESSORIES			

3-240-563-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH) (US,CND)		
3-240-563-21	MANUAL, INSTRUCTION (ENGLISH,FRENCH, GERMAN,DUTCH,ITALIAN) (AEP,UK)		

Ref. No.	Part No.	Description	Remark
PARTS FOR INSTALLATION AND CONNECTIONS			

251	3-930-163-21	BASE (FITTING)	
252	X-3371-178-1	BRACKET ASSY	
253	3-930-166-01	CUSHION (FITTING)	
254	7-682-961-01	SCREW +PSW 4X8	
255	4-304-511-00	NUT (M5), FLANGE	
256	1-590-519-21	CORD (WITH CONNECTOR) (BUS CABLE) (5.5m)	
257	1-590-874-11	CORD, CONNECTION (RCA PIN CORD) (5.5m)	



The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REVISION HISTORY

Clicking the version allows you to jump to the revised page.

Also, clicking the version at the upper on the revised page allows you to jump to the next revised page.

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